

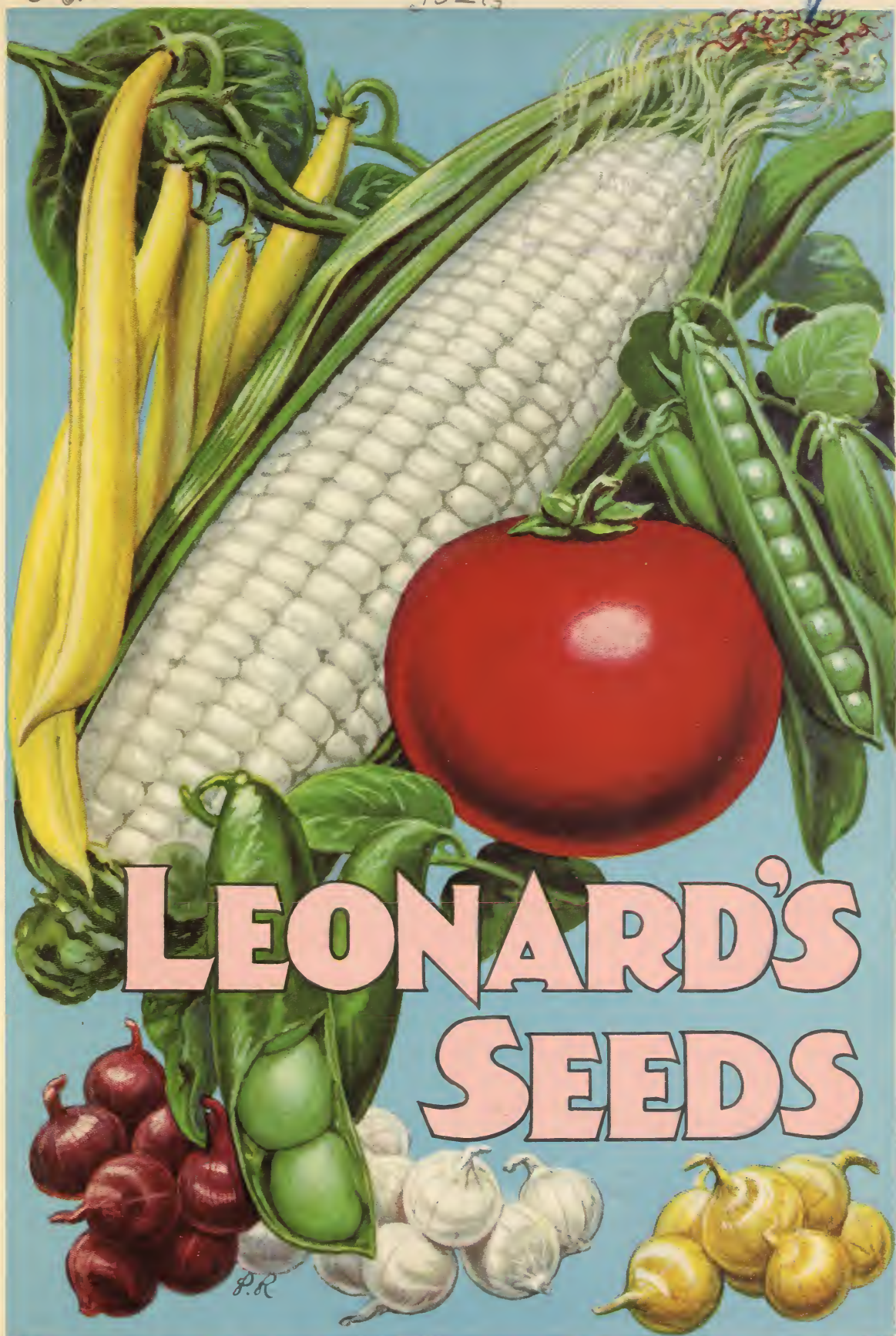
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1927



D. N. Shoemaker



# LEONARD'S SEEDS

*Are Sold by Your Dealer*

If he does not have all the varieties you want, he can get them from us promptly. Insist on Leonard's seeds — accept no others.



We Give No Warranty, express or implied, as to purity, description, quality, productiveness or any other matter of any Seeds, Bulbs, or Plants we send out, and we will not be in any way responsible for the crop.

## LEONARD'S SEEDS ARE GOOD

because we have put into them the best effort of each employee of a large, conscientious, careful organization. Something more than just growing and producing Seed.

## LEONARD SEED COMPANY

Long Distance  
Phone Boulevard 5910-5911

RETAIL STORES:  
810 W. Randolph Street  
10934 Michigan Avenue  
4845 Milwaukee Avenue

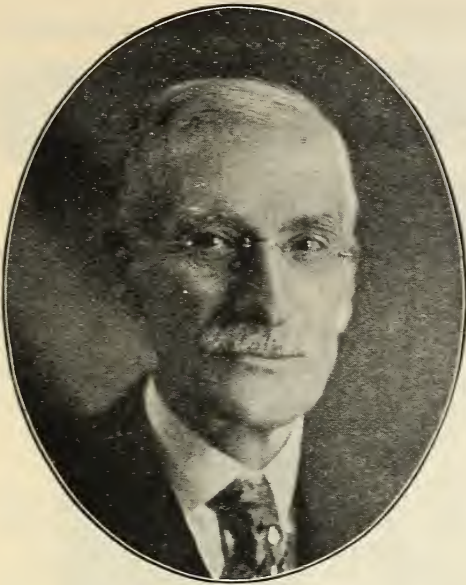
GENERAL OFFICES  
333-355 W. 35th Street  
At Shields Avenue

**CHICAGO**

Registered Cable Address:  
"LEONARD," Chicago

WAREHOUSES:  
Columbus, Wisconsin  
Marshall, Wisconsin  
Des Plaines, Illinois





**SIMEON F. LEONARD**  
Founder of Leonard Seed Co.



## WHERE TO BUY LEONARD'S SEEDS

If you are located within the Chicago Market Gardening district, purchase your supplies of Leonard Seeds at one of our retail stores at Chicago. These are located as follows:

810 W. Randolph St. On the Haymarket.  
4845 Milwaukee Ave., Jefferson Park.  
10934 Michigan Ave., Roseland.  
333-355 W. 35th St., at Shields Ave.

Outside of this Chicago territory buy Leonard's Seeds from the nearest Leonard dealer, who will supply you with the same quality seeds that we furnish to our very critical market gardeners' trade.

### SAVE TIME AND MONEY BY PATRONIZING YOUR LOCAL DEALER

There is no need of going to the trouble and expense of sending away for Seeds. We are sure that you will be pleased to purchase your Seed supplies through your own local merchant and believe that your trade should be given to the man who lives in your town, who helps build the community and pays taxes there as well. For this reason we have discontinued, entirely, selling Seeds at retail by mail. We ask that your purchase your supply of Leonard's Seeds from your local dealer.

When you buy Leonard's Seeds you can be sure that you are purchasing the best Seeds that can be produced, true to type and producing large crops under normal conditions. Leonard's Seeds have been giving much satisfaction for over forty years to thousands of market gardeners around the City of Chicago, whose livelihood depends upon the vegetable crops they grow and who buy Seeds according to quality, not price. Many of these gardeners have purchased Seeds from us, year after year, and would not think of securing their Seeds from any other source.

### THE DESCRIPTIONS IN THIS CATALOG

You will find, in this book, descriptions of all standard varieties of Vegetable Seeds. We do not attempt to describe all of the novelties which are listed by the different mail order houses and seed houses from year to year. Most novelties, with few exceptions, are some of the old varieties which have proven themselves to be of good value, renamed. We secure Seeds of all the new varieties which are put out by the different seed houses and when we find a variety which is truly worth while, we list it and carry it in stock.

Take, for instance, some of the varieties which have been put out by ourselves—the Leonard's Webber Wax Beans. This bean was originated in the Chicago market gardening district and was put on the market by us about ten years ago; has become a favorite but has been renamed by several seed houses and put out as a novelty for which they have secured higher prices. Then take Leonard's Potlatch Peas. This is a second early variety, growing about two feet in height and is one of the best producing peas on the market today. Also our stocks of Onion Seed; Leonard's Globe types of Onion Seed have been the standard for a good many years. You cannot secure any better stocks of Onion Seed than Leonard's Globe types.

We could go on through the entire list of Vegetable Seeds and pick out many varieties which are standard and yet are listed under different names from time to time by some houses.



# VEGETABLE SEED

## ARTICHOKE

The Globe Artichoke is grown for the use of its unexpanded flower heads that are cooked like asparagus. If started in a hotbed and handled like a tomato it matures the first year. Oftenest it is treated like a perennial, that is, given slight covering in winter it remains in bearing several years. Give the plant two to three feet space in three-foot rows and cut all flower buds before opening to continue the plants blooming.

**Large Green Globe.** The standard variety.

## ASPARAGUS

Complete cultural directions furnished on request. As some cutting may be begun only in the third year from planting the seed the use of roots or plants prove an expediency.

### ASPARAGUS SEED

**Conover's Colossal.** The standard variety; of large size, tender and of excellent quality.

**Palmetto.** It is of very large size, even and regular in growth and appearance. It is a very early sort, and immensely productive and of the best quality.

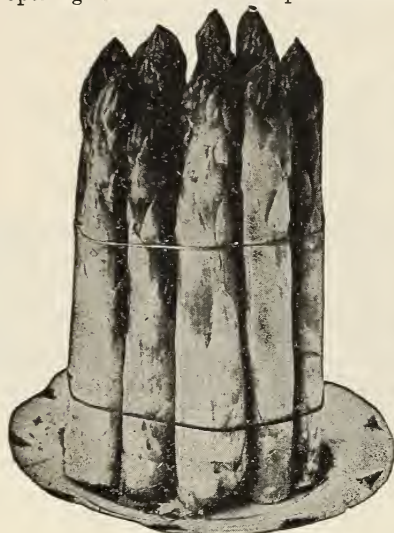
**Columbian Mammoth White.** A new and entirely distinct variety that produces shoots that are white, and remain white as long as fit for use.

**Giant Argenteuil.** Is a selection from imported French Argenteuil stock. An improvement upon the original. In the South it is regarded as distinctly superior to Palmetto.

**Washington.** A vigorous growing and very productive variety which has been bred to resist the disease known as "Asparagus Rust." The shoots are thick and heavy. They are long and straight, with closely folded tips. The color is rich dark green, tinted darker at the tips.

## ASPARAGUS ROOTS

Asparagus Roots can be supplied from November 1st to May 1st, but the best time for planting in the North is in the early spring.



PALMETTO

## BROCCOLI

Nearly allied to the Cauliflower, but more hardy. The seed should be sown in this district in the early part of May, and transplanted in June; further South the sowing should be delayed until June or July, and the transplanting accordingly from August to October. In parts of the country where the thermometer does not fall below 20 or 25 degrees broccoli may be had in perfection from November until March. It succeeds best in a moist and rather cold atmosphere.

**White Cape.** Heads medium size, close, compact and of creamy white color. One of the most certain to head.

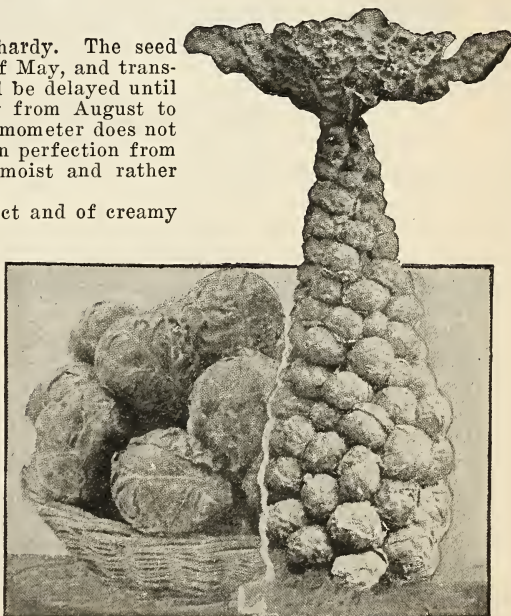
**Purple Cape.** Differs only in color.

## BRUSSELS SPROUTS

One Ounce of Seeds to 100 Yards of Row

A variety of the cabbage family, possessing the peculiarity of bearing upon its stem or stalk from 50 to 100 buds resembling miniature cabbage heads. The leaves composing these heads resemble Savoy Cabbage in their crumpled texture and also in their color. The heads or buds, from one to two inches in diameter, form one of the most delicious garden vegetables, only equaled by the cauliflower. Treat same as cabbage. Autumn grown sprouts, drilled in May and transplanted in July, generally do best, as the plants are quite hardy and the buds mellow under frost.

**Dwarf Improved.** A variety producing compact sprouts of excellent quality.



BRUSSELS SPROUTS



## BUSH BEANS GREEN POD VARIETIES

**Culture.** Beans are easily frost killed, so plant them at Corn planting time, on light, dry land. Cold, wet weather will rot the seed in the ground and fresh manure causes a rank growth of vine with a lack of pods. Hand cultivated beans can be drilled in poor soil as close as eighteen inches, but in rich soil with horse cultivation, thirty inches is required. Drill six beans to the foot and cover one inch deep, or plant four beans to the hill, eighteen by twenty-four inches apart. Two pounds of seed should plant 200 feet and sixty pounds an acre. Plant every third week for a succession up until August 1 in the latitude of Chicago. Shallow cultivation only should be given at all times and do not cultivate when the plant is in bloom as the plant will drop its blossoms; never cultivate when wet, as it causes rust. Pick beans before the bulge of seed appears and pick them clean to continue the plants bearing.

**Black Valentine.** This excellent variety is a great improvement over the old standard early Red Valentine, being one-third longer than that variety, with pods perfectly round and straight and of excellent quality. It also has the additional advantage of being suitable for both early and late planting and is extremely hardy. It will withstand early and late frost, is an excellent shipper, a large yielder, and of very handsome appearance.

**Long Yellow Six Weeks.** The vine is large, vigorous, branching and productive, with large leaves. Pods long, straight, thick, flat in shape, green in color, of good quality when young and fair as they near maturity. Is ready for picking 45 days from planting.

**Bountiful.** This green podded Bush Bean is a heavy cropper and very early, of fine shape, stringless and good quality. Its hardiness and great productiveness make it one of the very best Bush Beans.

**Extra Early Refugee.** Very much earlier than the Old Style Refugee, or 1000 to 1, being fit to eat in 48 days from planting. More dwarf and compact in growth, while the pods are round, solid, tender, and of excellent quality, suitable for table use, canning or pickling.

**Refugee or 1000 to 1.** The vines large, spreading, exceedingly hardy, with small, smooth leaves, very late and bear long, cylindrical green pods of excellent quality. Highly esteemed for late planting and canning and pickling.

**Stringless Refugee.** A new variety of round green podded Refugee Beans earlier than the Refugee 1000 to 1, and absolutely stringless. This Bean has all of the good points of the old Refugee and in addition is a stringless variety which makes it very desirable for truckers and the canning trade where a good yielding, absolutely stringless, green round podded Bean is wanted.

BLACK VALENTINE

**Giant Stringless.** A very hardy, stocky vine, pods long, round and green in color, of exceptionally fine quality and stringless throughout its entire growth. About a week earlier than Red Valentine and much more prolific.

**Burpee's Stringless Green Pod.** This bean produces a vine similar to Red Valentine, but develops pods to an edible condition in 42 days, about four days earlier than Valentine. The pods are green, not quite so round as Valentine and less curved. The pods are stringless, absolutely so, this quality at once placing the variety at the top of the list among table beans, while the early maturity is of great merit. This stringless quality is of particular value, the pods breaking as short and free as pipe stems.

**Full Measure.** A fine stringless early medium green bean. Pods round, straight, 5 to 6 inches long, and very fleshy. Seed resembles Red Valentine.

**Tennessee Green Pod.** Vine prolific, foliage dark green with leaves large and crumpled. Pods long, flat, irregular in shape, bright green and of most excellent quality. Seed medium size, oval flat, yellowish brown in color.

**SOME PLACE NEAR YOU LEONARD SEED IS SOLD.  
IN BULK ONLY.**



## BUSH BEANS—Green Pods—Continued



EARLY IMPROVED RED VALENTINE

turing the crop very regularly. It is extra early, the pods being fit to pick four days before other varieties of approximate size.

**Dwarf Horticultural.** Vines very productive, compact, upright, with large leaves. Pods medium length, cylindrical, curved, with splashes of bright red on a yellowish ground. Seed large, oval, plump and nearly covered with splashes of bright red.

**French Bush Horticultural.** One of the most attractive of the Horticultural family. Vine very erect, straight and compact, with a tendency to throw out short runners. Pods prolific, seven to eight inches long, broad, stringy and fibrous, and distinctly marked with a very vivid crimson.

**Leonard's Yellow Dot Stringless Green Pod.** Without doubt the finest flavored bean ever introduced. It is a very early, tender, green pod variety, perfectly stringless and of a delicious flavor.

**Leonard's Pheasant Eye.** Vines hardy, sturdy, well leafed. Pods long, meaty, stringless and of excellent quality. Originated from plants found in Bountiful; it retains all the good points of that variety, with added symmetry of pod. Seed white, splashed more or less at eye side with yellowish brown, which coloring also surrounds eye.

**Lows Champion.** A very old variety of the Horticultural type, sometimes known as Red Cranberry. Pods about five inches long, very flat, light green in color, with more or less string and of medium quality.

**Goddard or Boston Favorite.** A type of Horticulture and a good shell bean. Pod and bean somewhat larger than the Dwarf Horticultural; pods about six inches long, flat, straight, green and much splashed with bright red.

**White Kidney.** A slender white bean of superior quality; used shelled, green or mature.

**Red Kidney.** Well known shell bean.

**Large White Marrow or Mountain.** Vines are large, slender, spreading, with short runners and small leaves; very prolific; pods medium, broad, green, changing to yellow; beans large, clear white, ovoid, cooking very dry and mealy.

**Improved Tree or Dwarf White Navy.** A variety developed in western New York. Is a sure cropper, and not only more prolific than the common white bean, but also of better quality.

**Broad Windsor, Bob or Fava.** The standard English horse bean.

**LEONARD'S SEEDS—SUCCESS**



## BUSH BEANS—Wax Pod Varieties



IMPROVED GOLDEN WAX

**Leonard's Webber Wax.** Unquestionably one of the best wax podded beans ever introduced. It is a market gardener's bean, having originated in the market gardening section of Chicago. The vine is strong, holding the pods well up. The pods are of an exceedingly bright yellow color, handsomer in this respect than any other wax bean; in shape they resemble Wardwell's Wax but are rounder and more meaty. The color of the seed is yellow.

**Michigan White Wax.** This splendid variety may be briefly described as a white seeded Golden Wax. It is one of the earliest of the dwarf, snap beans. The vines are very vigorous and unusually productive. The pods are golden yellow, fully as attractive as the well-known Golden Wax and of the same exceptionally fine quality. The seed is white, a most valuable feature heretofore unattained in a bush bean of highest quality.

**Hodson Wax.** Extremely vigorous, very hardy and productive, though rather late. Noted for its very large, flat, gently curved, attractive wax pods; rather fibrous and stringy.

**Wardwell's Kidney Wax.** Hardy and productive, pods long, broad, thick, flat, and of a delicate waxy yellow, of excellent quality and with no string in the early growth, ready for table 48 days from planting.

**Golden Eye Wax.** Almost rust proof, very hardy, early and prolific. Pods large, yellow, 5 to 6 inches long, flat and almost straight, and with considerable fibre and string. Beans are white with a yellow eye. Very showy; follows Old Style Golden Wax in season.

**Currie's Rust Proof Wax.** An excellent Wax Bean in every respect. Rust proof, tender, thick, flat pods of very good quality. Very little string in early stages, developing a little when nearing maturity. Fit for table use 47 days from planting.

**Improved Golden Wax.** Undoubtedly one of the best wax beans for the home garden. Rust proof an improvement on the old style Golden Wax. Pod is semi-round, yellow, of good quality, and has no string. Ready for picking 47 days from planting.

**Davis White Wax.** This bean is adapted alike for the canner, market gardener, shipper or amateur. The dry bean is large, kidney shaped, and white in color, making it one of the best for cooking in a dry state. Pods are long, meaty, flat in shape, and of a beautiful yellow color and fair quality.

**Detroit Wax.** A distinct variety which is worthy of a place in every garden. The waxy, yellow pods are produced in great abundance and the quality is extra fine.

**Prolific Black Wax.** The old standard Black Wax Bush Beans. It is so good that it is worthy of special notice. The pods are round, brittle, of handsome golden yellow color, and of buttery flavor when cooked.

**Pencil Pod Black Wax.** Pencil Pod Black Wax grows a taller, stronger and more vigorous bush than the Improved Prolific Black Wax, long, slender, straight, handsome pods, shaped very much like a pencil.



CURRIE'S RUST  
PROOF WAX



## BUSH BEANS—Wax Pod Varieties—Continued

**Sure Crop Wax.** A vigorous growing, very productive variety, similar in general appearance of plant and seed to Currie's Rust Proof Wax; the pods, however, are more fleshy, of decidedly better quality and are stringless at practically all stages of growth. Pods about six inches long, nearly round, attractive in color and remain a long time in condition for snaps. A decided improvement over Currie's Wax.

**Round Pod Kidney Wax.** A very handsome, midseason variety especially desirable for snaps for the home garden. The plants are of strong growth, spreading and very productive. The leaves are large, broad and roughened. The pods are long and round, five and one-half inches, slightly curved, light yellow, wax-like, stringless and of the very best quality.

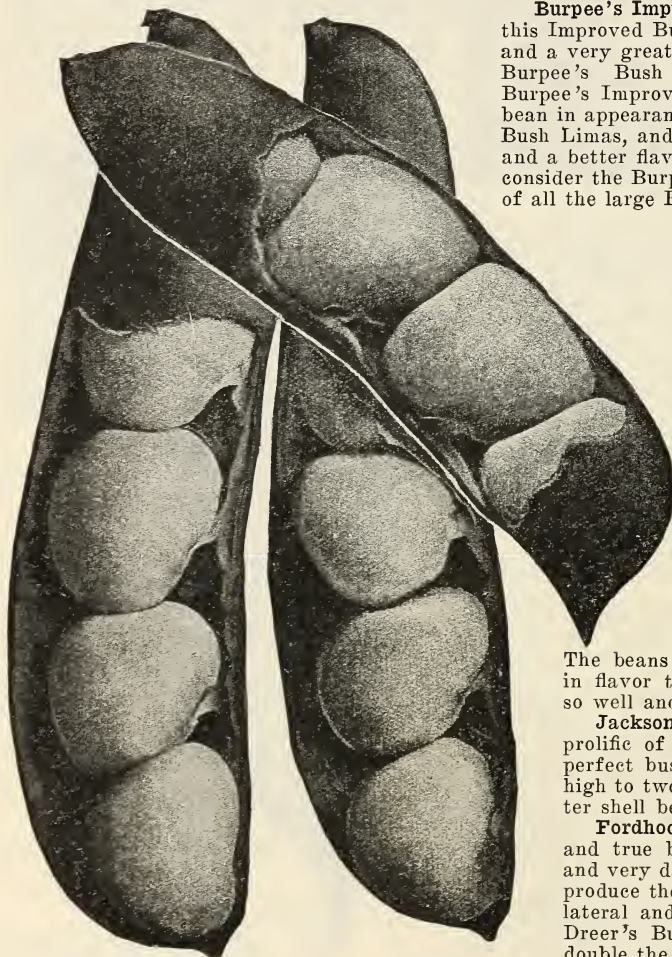
**Refugee Wax.** A perfect Refugee with wax pods. Pods long, round, and of a golden yellow color. One of the earliest, quality excellent and is fit for picking 57 days from planting. A very fine canning bean.

## DWARF LIMA VARIETIES

**Culture.** As the lima requires even more heat than other beans, a failure will follow a too early planting. The bean when favorably planted throws out from what we term the bean's eye a stout root; this root in turn lifts the bean above the ground. The bean then opens its halves or false leaves, or cotyledons, and the true leaves soon follow. If in planting the bean is thrust into the soil eye down, and just below the surface, the bean is in a favorable position to begin its growth. However, the crop can be secured though with a lesser percent of germination by dropping the bean in any position.

Bush or Dwarf Limas are earlier than pole limas and are planted in twenty-four to forty inch drills, three to six inches apart in the row according to varieties. Two pounds plant one hundred and twenty-five to one hundred and fifty feet.

**Burpee's Bush Lima.** Plants eighteen to twenty inches high, very productive. Pods four to four and one-half inches long, containing three to four beans, which are as large as the pole sorts. Bean flat and white.



FORDHOOK BUSH LIMA

**Burpee's Improved Bush Lima.** Our trials show this Improved Bush Lima Bean to be very different and a very great improvement over the old type of Burpee's Bush Lima so well known. This Burpee's Improved Bush Lima is a thicker, fatter bean in appearance, looking more like the Fordhook Bush Limas, and is in our opinion a better yielder and a better flavored bean than the Fordhook. We consider the Burpee's Improved Bush Lima the best of all the large Bush Lima varieties. Very early.

**Henderson's.** This is a bush form of the small Seiva pole bean. It is the original bush form of the pole beans. It is the most productive of any, and on the whole is a vegetable of great merit.

**Wood's Prolific.** Quite similar in character and habit of growth to Henderson's Bush Lima, though the beans are somewhat larger and thicker.

**Dreer's.** The true bush form of the chubby Dreer's or Potato Lima. The pods are heavy and thick. It is quite productive and of excellent quality.

**New Wonder.** This gives the largest and best returns—a big crop from a small space—and is a decided improvement on the original type of Burpee's Bush Lima.

The beans are of flat shape and fully equal in flavor to the famous Dreer's Bush Lima, so well and favorably known.

**Jackson Wonder or Calico Lima.** Most prolific of all bush lima, of Georgia type, a perfect bush butter bean growing ten inches high to two feet, good for summer use or winter shell beans.

**Fordhook Bush Lima.** Vines strong, erect and true bush lima growth. Foliage heavy and very dark green in color. The stalks that produce the blossoms are thrown out from the lateral and main stalks. The pods resemble Dreer's Bush Lima, but average more than double the size and contain from three to five beans to the pod.



## POLE BEANS

**Culture.** The pole bean climbs, sometimes needing a little training, over any support given it. A good practice is to set firmly in the ground every three or four feet each way, poles that are, when set, about six feet high. Some time after bunch beans are planted, six or eight pole beans are planted one inch deep near the base of each stake and later thinned to three or four plants to the pole. Thirty pounds of pole beans generously plants an acre and one pound plants one hundred hills. The pole bean bears over a longer period than the bunch bean and is generally considered of superior quality, but it requires more labor, longer time to mature, and is more sensitive to adverse climatic and soil conditions. Note that the vine turns only one way around its support.

When too old for use as a green snap bean, use any bean shelled, or still later, when it is hard and dry, it remains equally serviceable.

**White Creaseback.** An extremely early Pole Bean. Vines small to medium and wonderfully productive. Bearing pods in clusters of from 4 to 12, and medium in length. An excellent shipper.

**Dutch Case Knife.** Vines moderately vigorous, climbing well and excellent for a corn hill bean; leaves large, crumpled, and pods very long, flat, green in color, becoming creamy white later. Beans broad kidney shaped, and white in color.

**Red Speckled Cut Short** (or Corn Hill). This is the best sort to plant in hills of corn. A great cropper.

**Striped Creaseback or Scotia.** A very hardy and productive cornfield bean. Pods six and one-half to seven inches long, round, straight and creasebacked; slightly stringy, very fleshy, fine grained, attractive and good quality; color dark green.

**Tennessee Wonder.** Somewhat similar in habit to Kentucky Wonder, but with immensely larger, straighter, smoother and more creasebacked, green pods. More suitable as a shell rather than snap bean.

**Kentucky Wonder.** Vines vigorous, climbing well, and very productive, bearing its pods in large clusters; blossoms white; pods green, very long, often reaching nine to ten inches. Nearly round when young and very crisp, although as they reach maturity they become irregular and spongy. Dry beans long, oval, dun-colored.

**Kentucky Wonder White Seeded or Burgers Stringless.** A very early, white seeded variety. Pods six to seven inches long, round, slender and straight; very tender, fleshy and stringless; of high quality; color dark green.

**Lazy Wife.** One of the most productive and easily gathered of the Pole Beans, hence its very discourteous name. A most excellent bean for the home garden.

**London Horticultural, or Speckled Cranberry.** Vines moderately vigorous, bearing short, broad pale green pods, becoming streaked with bright red as they near maturity. Beans large, ovate and splashed with red. Used either green or in the dry state.

**Noxall or Missouri Wonder.** Noxall is a sure cropper, giving large crops when others are an entire failure. The green pods are long, round and tender, excellent for planting among corn, good for either snap or shelled beans.

**Early Golden Cluster Wax.** One of the very finest pole beans. Very early, being only a week later than Golden Wax.

**Kentucky Wonder Wax.** One of the earliest of the pole wax sorts. Pods eight to nine inches long, thick, decidedly creasebacked, very fleshy, brittle but stringy, attractive and fair quality; color light yellow.

**Dreer's Improved or Challenger Lima.** This is a bean of rather peculiar shape, being thick and plump, rather than flat and oval.

**Early Jersey Lima.** Ten days earlier than any other Lima. Recommended as a most profitable Lima Bean.

**Large White Lima.** The large Lima is a general favorite wherever it can be cultivated on account of its excellent flavor and productivity.

**King of the Garden Lima.** The old standard market and family sort. The vine begins to produce pods at the foot of the pole, and the bearing season continues until frost. Pods large and well filled with beans of mammoth size.

**Carpenteria Pole Lima.** A very desirable Pole Lima; vines vigorous, producing an abundance of large medium green pods five to six inches long, containing four beans of large size much thicker than the usual Pole Lima.

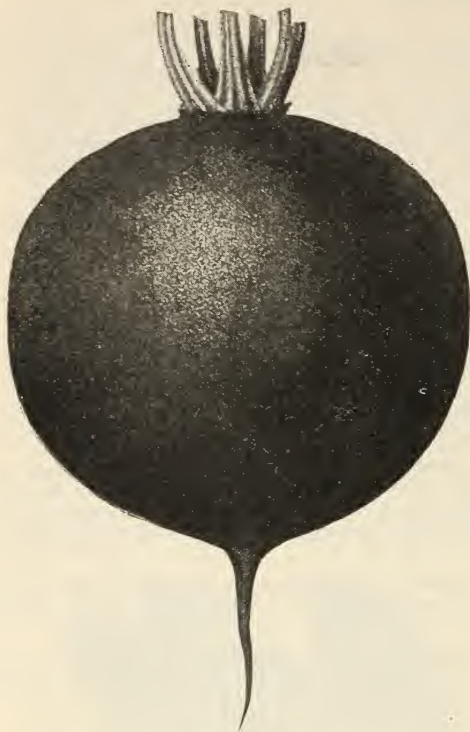
**Carolina Small White Lima or Seiva.** Vines vigorous with many short branches, so that they are sometimes grown without poles; very early and productive, bearing short pods, which are thin and curved.

**Florida Butter or Speckled Lima.** Will make an abundant crop under weather conditions that cause other varieties to fail. Seed of Seiva size speckled white and brownish red.

**Scarlet Runner.** Height ten feet with dazzling scarlet flowers from July to October; both ornamental and useful. It is used either as a string or shelled bean.

Capitalize your back yard—put it on a paying basis.  
Grow your own vegetables.

## TABLE BEETS



CRIMSON GLOBE

**Crimson Globe.** This splendid variety has now been grown quite extensively in many sections of the country and the many good reports received from our customers indicate that it gives most thorough satisfaction. The root is of medium size, generally about three inches in diameter, very handsome in shape, being a little deeper than round, with a remarkably smooth surface. It has a very small tap root. The very dark leaves are small and borne on slender stems which occupy but a small portion of the root, but it is the exquisite tenderness of the flesh and the complete absence of any stringy or woody character that so thoroughly distinguishes this beet. The interior color is very deep crimson throughout, but is ringed or zoned in a most beautiful manner, making it very attractive in appearance.

**Early Wonder.** A selection from Crosby's Egyptian though not so early as our strain of that variety. Roots very uniform, nearly globe-shaped with small top and tap root; skin dark red, flesh deep blood red, with little zoning. Popular with market gardeners for early or late planting.

**Edmand's Early Blood Turnip.** The best sort for general crop. In quality one of the finest, exceedingly dark, shape globular, having only one tap root. Very popular with market men.

**Dewing's Early Blood Turnip.** A good variety for main crop. Keeps well. Like Edmand's, but lighter color.

**Long Smooth Blood.** The standard long late sort. Very dark, blood-red flesh; quality fine.

**Improved Early Blood Turnip.** An extra selected stock of blood turnip, having larger, coarser tops and roots than the Detroit Dark Red, and requiring a considerable longer time to mature. Excellent for summer and autumn use.

**Culture.** As soon as the soil can be worked in spring, sow beet seed in twelve to eighteen-inch drills for hand hoeing or eighteen to thirty-inch drills for horse cultivation, dropping twelve seed to the foot. Cover the beet seed, which is really a beet fruit containing one or more seeds, one-half inch deep. Later, thin the beets to stand five to the foot. Planted April 1st the early varieties should be marketable June 1st or the crop may be advanced several weeks by starting under glass and transplanting to the open, first giving the beet tops a severe pruning. Use one ounce of seed to one hundred feet of row and five or six pounds to the acre. Beets sown in early July should be ready to store in pits or in sand in the cellar when freezing weather begins.

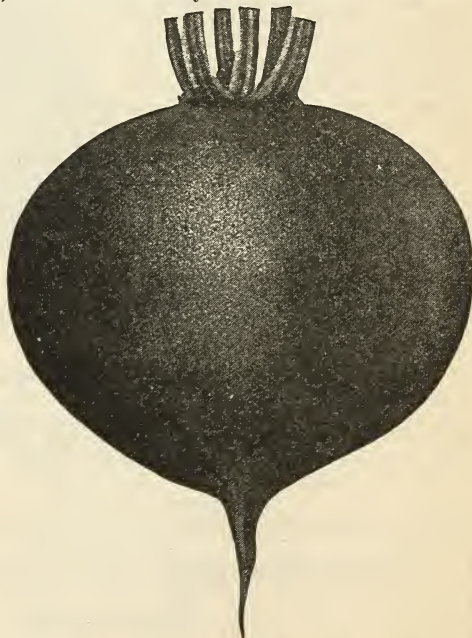
**Leonard's Egyptian.** This is the earliest and best bunching beet for market gardeners. It has been grown for many years by the gardeners of Chicago, and now they prefer it above all others.

**Early Flat Egyptian.** The well-known early variety. Color, extra dark; shape, flat; quality, excellent.

**Early Eclipse.** A choice early variety; well known and popular. Shape, globular; quality, good; color, light.

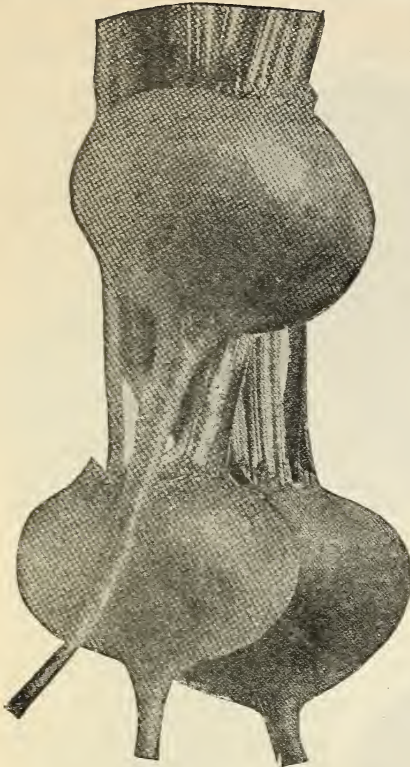
**Lentz Extra Early Blood Turnip.** A favorite market-gardeners' beet around Philadelphia. Very early and sweet; ringed red and white.

**Early Model.** A medium early variety. The roots of Early Model are of nice size and grow uniformly perfect, nearly globe shaped, with a slim, smooth tap root. Leaves are small, color dark crimson. The color and quality are excellent, flesh being tender, sweet, rich deep crimson and fine flavor.



EARLY IMPROVED BLOOD TURNIP





DETROIT DARK RED

## MANGEL WURZELS

Mangel Wurzel, called also stock beet or cow beet, is a very large beet growing mostly above the ground and all stock eats it greedily. Plow deep for this crop and in May or June plant six Mangel seed to the foot in two or three foot rows, later thinning to a ten inch stand. One ounce sows generously one hundred feet of row and an acre requires five to six pounds. When a light frost has occurred, lift the roots and store in pits or cellars.

**Leonard's Improved Mammoth Long Red.** The largest and most productive variety. Immense crops can be grown from it.

**Norbiton Giant Long Red.** Very large, excellent variety for feeding stock.

**Golden Tankard.** Shape cylindrical, color deep rich yellow, flesh yellow circled with white. Unequaled for feeding stock.

**Yellow Globe.** Globular shaped roots. More productive than Long Red in shallow soil. Very nutritious and a good keeper.

**Orange Globe.** We think this one of the best varieties of Mangel Wurzel.

## SUGAR BEETS

The Sugar Beet, grown for the manufacture of sugar and frequently used for stock feeding, is a yellowish-white beet smaller than the mangel but containing a much greater percent of sugar. In growing, the sugar beet is treated like the mangel except that only six or eight inches of space is given each beet in the row.

**Lane's Imperial Sugar.** Good for making sugar, also stock feeding. A hardy and productive sort. Yields fourteen to sixteen tons per acre, and contains about 16 per cent of sugar.

**Vilmorin's Improved Sugar.** In general, the most desirable beet for the factory is the one containing the largest percentage of sugar.

**Klein Wanzleben.** A little larger than Vilmorin's Improved, yielding from twelve to eighteen tons per acre, and containing about the same amount of sugar. It grows below the surface, and the green leaves are rather large and spreading.

**Giant Half-Sugar.** This unites the large size of the mangel with the greater feeding value of the sugar beet. The roots average ten to twelve inches, and the outline is that of a broad, thick wedge. The upper portion is of a soft bright pink, shading lighter toward the bottom where the lower portion for about one-third the length is white.

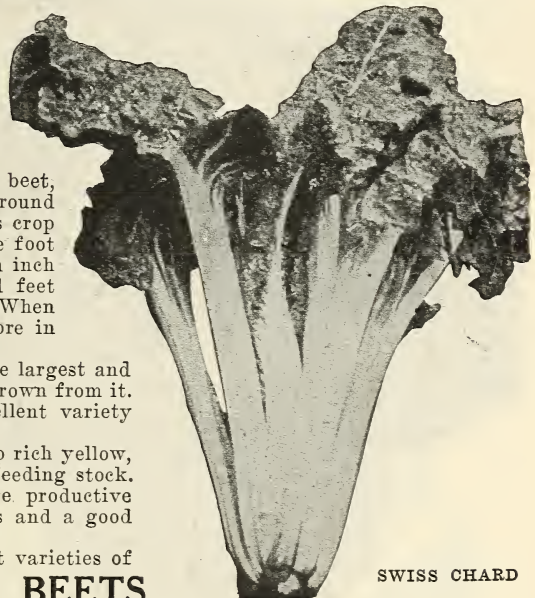
**Detroit Dark Red.** Long experience has shown this variety to be the best deep red turnip beet not only for market gardeners, but for home use. It is also by far the best for canning, making a strikingly handsome product, much superior to that obtained from any other variety. Its small, upright-growing tops, early maturing and the splendid shape and color of the roots make it popular with everyone who plants it. Tops small, upright growing, so that the rows may be close together; leaf stems and veins dark red, blade green; roots very crisp; tender and sweet and remaining so for a long time. We believe that stock of this variety will produce a crop more uniform in shape, color and quality than any other.

**Crosby's Egyptian.** This variety resembles the Egyptian only in its extreme earliness. The stock we offer is of a distinct vermilion color, which is very attractive not only in the beets as pulled, but after they have been cooked. They are also more spherical than the Extra Early Egyptian and we think of better quality.

**Swiss Chard, Silver.** This robust growing variety is often referred to as the Spinach Beet and is grown for its leaf, not for its root. The thick rib may be stripped from the leaf and used as in asparagus while the rest of the leaf is served as "greens."

**Swiss Chard, Lucullus.** An improved type of Chard. Of more upright growth than the Silver variety; leaves yellowish-green, much crumpled and curled, mid-rib and veins white, stalks thick, broad and flat, and as large as rhubarb.

**Swiss Chard, Dark Green.** Color very dark green, leaves fleshy, thick, tender, not as crumpled as Lucullus but with a very broad white mid-rib.



SWISS CHARD



## CABBAGE

**Culture.** Cabbage grows successfully on a wide variety of soils and experience points to liming, deep plowing and heavy manuring as successful practices.

Cabbage plants when properly hardened by gradually being brought to a low temperature and the quantity of water in them diminished, will stand any frost and some considerable freezing. Yet a cabbage plant raised at a high temperature and full of water will be killed by even a light frost. Cabbage can be grown by planting the seed heavily where the crop is to grow and thinning the plants, but a better practice is to raise the plants, without crowding, in a seed bed, which is not richer than the fields to which the plants go. Transplant if possible on a cloudy day, watering the plants if the soil is dry. South of the Ohio seed is frequently planted out of doors in September and wintered in cold frames or in very Southern localities the plant is fall set on a shady side of the furrow to avoid as much as possible the deadly freeze and thaw. For early cabbage north of the Ohio, sow seed in hot beds in February, transplant in cold frames in March, and set outside in April, or sow seed out of doors as soon as the soil can be worked in spring, covering the seed one-third inch deep. All vegetable plants are best when grown without cheek so let as much soil adhere to the roots of the plant in transplanting as will hold, and set up to the first leaf. At this time the plant should have four or five pairs of leaves and be four to six inches high.

Set small varieties to be worked by hand as close as eighteen inches each way, while large late varieties, horse cultivated, need thirty or more inches each way.

Nitrate of soda will hurry the crop and if heads are so early as to begin bursting push the head to one side far enough to tear off the roots on one side.

When club root appears, lime the soil heavily and do not plant brassica, that is, turnips, cauliflower and kindred crops upon this sick soil for two or three years.

Fight cabbage worms with Paris Green, Hellebore or other good stomach poison.

For cabbage maggots pour kerosene emulsion about the roots or cut tarred paper in three-inch squares split the square to the center and place this collar on the ground about the plant when the plant is set. For plant lice or aphid use tobacco tea or kerosene emulsion.

**Early Jersey Wakefield.** The most popular extra early cabbage. The plants are compact, erect, with few outer leaves, and withstand cold and unfavorable weather well, as they are very hardy. Heads medium size, cone-shaped and solid. Our stock has been very carefully selected.

**Large or Charleston Wakefield.** This is a selection from the best early Jersey Wakefield which will average about 50 percent larger.

**Early Winnigstadt.** An early variety of excellent quality not as early as the Wakefield.

**Early Spring Cabbage.** The earliest flat head, as early as Jersey Wakefield. Yields one-third more than the early pointed heads. Solid, uniform and finely grained heads. Stem is short and extends but little into the head.

**Henderson's Early Summer.** A standard summer variety. We have the true stock.



EARLY JERSEY  
WAKEFIELD

**All Head Early.** One of the finest early flathead cabbages.

**All Seasons.** A fine variety for any season, of good shape and size.

**Henderson's Succession.** A good summer cabbage; also makes a good cabbage to succeed itself.

**Early Dwarf Flat Dutch.** An early cabbage of good size. Heads are flat and very solid.

**Houser Flat Dutch.** An extra large, round, hard heading, late sort.

**Stein's Early Flat Dutch.** An early and excellent type of Early Flat Dutch with a medium stem; heads round, flat and solid.

**Early Drumhead.** A second early, sure heading cabbage of good quality. Plant of compact growth. Head large, thick, flattened on the top, solid, crisp and tender.

**Fottler's Early Brunswick.** An early fall variety well known and popular.

**Glory of Enkhuizen.** This is an excellent mid-summer variety. It comes in about a week earlier than All Seasons, makes a nice large head, has few outer leaves and can be planted close. Our tests show it to be worthy of a place among the new varieties of merit and we can recommend it as a good addition to the list.



## CABBAGE



COPENHAGEN MARKET

**Copenhagen Market.** One of the finest early round-headed cabbages in cultivation. It is desirable on account of the remarkable characteristic of maturing the heads all at the same time, enabling the grower to gather his crop with less expense and permitting the cleaning of the land at the first cutting. The heads average about ten pounds each in weight, are hard and solid with small core. The quality is extra fine and sweet. It is a short stemmed variety, the heads nearly resting on the ground. The leaves are light green,

rather small, saucer-shaped and tightly folded, making it possible to set them close together in the field.

**Sure Head.** A fine variety for main crop. A good shipper and sure header.

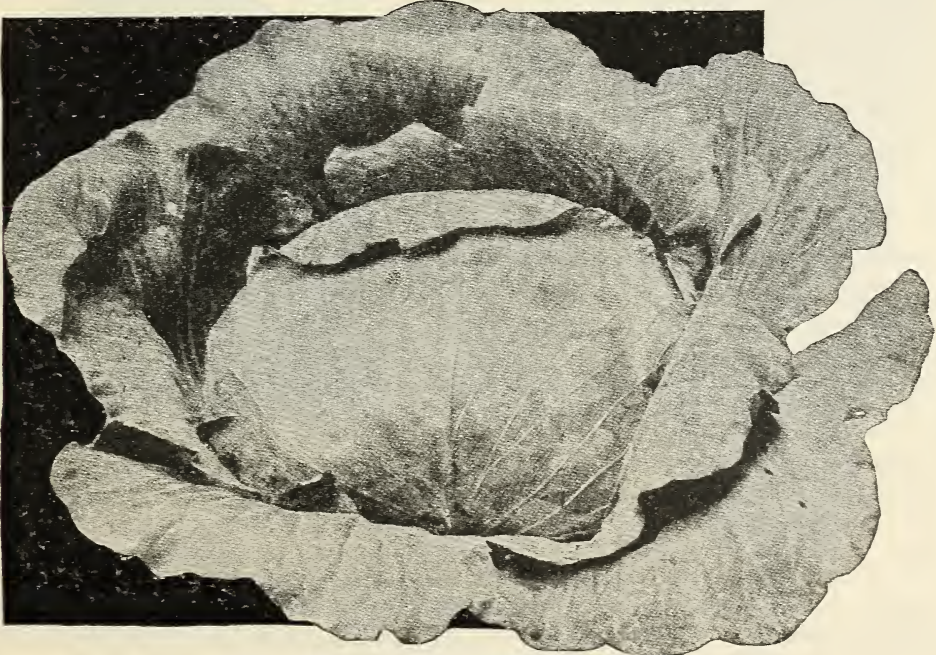
**Louisville Drumhead.** This fine cabbage is very popular with the kraut makers. It is a medium late variety, forming a large solid head, which seldom bursts. It is used largely by shippers in the vicinity of Chicago who ship cabbages South.

**Large Late Drumhead.** A late variety of large size.

**Leonard's Winter.** A direct cross of the Leonard Luxemburg and the Leonard's strain of Holland, and combines the good points of both. It has a shorter stem and more lasting color of the Luxemburg with a rounder head than the Holland.

**The Lupton.** The Lupton Cabbage is the result of an effort to combine in one variety the best qualities of the second-early and the late sorts. It is a little earlier than any one of the various strains of Flat Dutch and Drumhead.

**Leonard's Faultless.** It is the succession type, but is earlier, head is rounder, sets out of the under leaves higher, has a darker color of leaf and can be planted closer.



LEONARD'S FAULTLESS CABBAGE



## CABBAGE



**PREMIUM LATE FLAT DUTCH**

**Premium Late Flat Dutch.** This variety of late cabbage is a standard in all sections for winter use. It makes a large solid head which keeps long without bursting, and is adapted to a more varied climate than probably any other variety we grow.

**Golden Acre.** An extra early selection of the Copenhagen type, and the earliest of the round headed cabbages, maturing with Jersey Wakefield. Plant small, dwarf and compact, with few outer leaves; heads of medium size, round as a ball, hard, solid and very uniform.

**Volga.** One of the earliest main crop cabbages of superior quality. Very desirable where a large uniformly round head with short stem and compact growth is wanted. Matures very early for a variety furnishing such large heads of excellent shape. Very hard, good keeper.

**Danish Ballhead.** For a winter cabbage for early spring sales some of our local gardeners consider this variety excellent. It has been selected and perfected for more than fifty years by the Danish gardeners, who prize it so highly that they grow it almost exclusively for winter cabbage, and annually export large quantities of it. It is hard heading, and long keeping cabbage. Heads round as a ball, solid, fine grained, has few outer leaves tender, crisp and of unexcelled flavor.

**Wisconsin No. 8.** A yellow resistant strain of cabbage of the Holland type.

**Autumn King.** Probably the largest of the cabbage family; heads very large and flat; leaves of upright growth, frilled or scalloped unlike other varieties; late in maturing and requires strong soil to head well.

**Improved American Savoy.** Closely approaching the cauliflower in delicacy and delicious flavor. The best of all Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and is a sure header.

**Drumhead Savoy.** The best winter keeper of the Savoys; heads late, round, compact, and solid; leaves numerous, deep green and coarsely crimped.

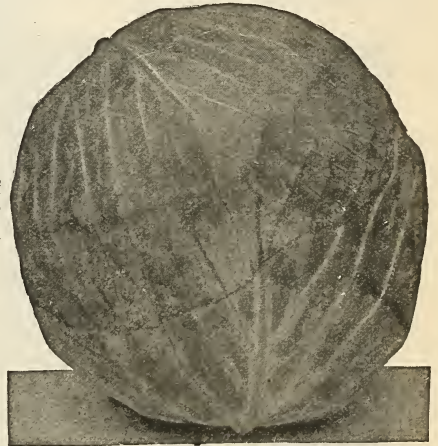
**The Holland, Leonard's Strain.** For shipping or for storing for the late spring market, this cabbage is unsurpassed. The popularity and paying qualities of this cabbage itself when it is true are points long ago decided. True Holland seed is produced at a few points only and seed grown elsewhere fails to show the proper characteristics. Since 1896 we have been fortunate in selling the seed crop of one grower of this cabbage and it has met the requirements of exacting cabbage growers of Chicago, Racine and other Holland Cabbage shipping points. We do not hesitate to say that Leonard's strain of Holland Cabbage is the best seed purchaseable.

**Mammoth Rock Red.** The largest heading of any red sort. Heads are hard, of deep red color, quality excellent.

**Red Drumhead.** The standard pickling variety. A good keeper.

**Red Stonehead.** Heads perfectly round and extremely solid; large in size; deep purplish red, showing but slight traces of white.

**Chinese Cabbage or Pe Tsai.** Many gardeners have failed in growing this vegetable for want of knowledge as to its culture. If sown in the open in early spring it usually shoots to seed without forming heads, but if sown in the fall little trouble is experienced in growing it successfully. A good rule to follow is to sow the seed at the time you sow your fall turnips and when the plants are large enough transplant them one foot apart, setting the plants deeply in the soil. Some success has been had by sowing seed early in hot beds and transplanting to the open when large enough, but this must be done early in the spring, before hot weather sets in. When the plants are nearly matured they may be blanched by tying them closely with burlap.



**THE HOLLAND**



## CARROTS

**Culture.** The carrot, whether used raw, fried, boiled or stewed, used alone or combined with other vegetables or meat is not surpassed in nutritious healthfulness by any vegetables catalogued. Plant carrots in the latitude of Chicago from the time the soil can be worked in the spring till July, in one to two foot rows for hand cultivation or in thirty inch rows where a horse drawn tool is used. Use one ounce of seed to one hundred feet of row, three to four pounds to the acre, covering one-half inch deep and later thin to a four inch stand. To cultivate the rows at an early date, sow radish seed which germinates quickly with carrot seed, which germinates slowly. Do not overlook the value of this crop as a stock food.

### Early French Forcing.

The earliest variety in cultivation and the best suited for forcing. Tops small, finely divided. The red-dish-orange colored roots are nearly round. When fully matured they are about two inches in diameter, but should be used before they are full grown and while young and tender.

**Early Short Horn.** Excellent for early planting out of doors. Tops small, coarsely divided; roots top-shaped, but tapering abruptly to a small tap; skin orange red.

**Half Long Nantes.** Tops of medium size; roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core. Of the finest quality and one of the most symmetrical and handsome of the medium

OXHEART CARROT

sized sorts; excellent for the market or home garden.

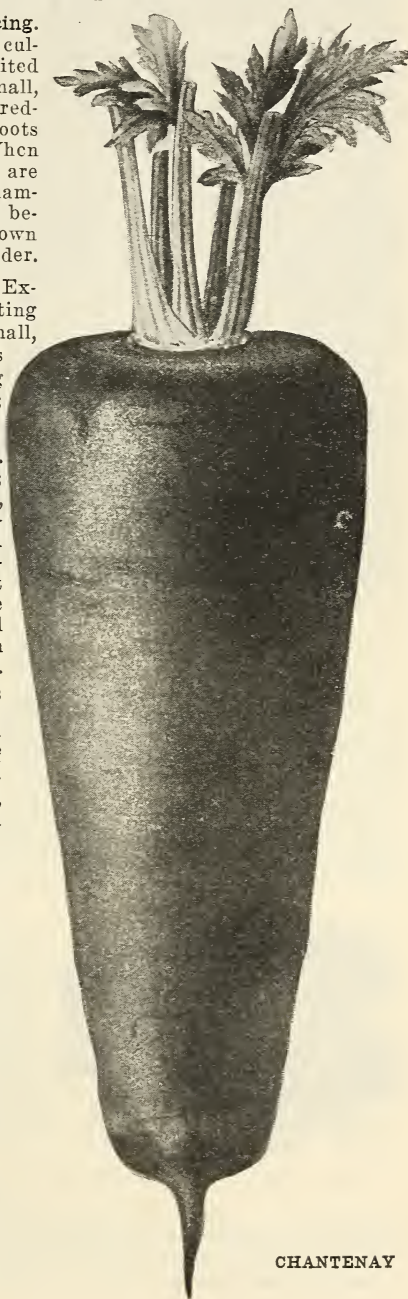
**Chantenay.** Tops medium sized; necks small; roots tapering slightly but uniformly stump rooted and smooth; color deep orange-red; flesh very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any, is a heavy cropper and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort.

**Guerande, or Ox Heart.** Tops small for the size of the roots which are comparatively short but often reach a diameter of five inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This variety is especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. When young excellent for table use, and when mature equally good for stock.

**Danvers.** Grown largely on account of its great productiveness and adaptability to all classes of soil. Tops of medium size, coarsely divided. The smooth and handsome roots are deep orange, of medium length, tapering uniformly to a blunt point; flesh sweet, crisp, tender and of a deep orange color. Although the roots of this variety are short, they produce as large a bulk as the longer field sorts and are more easily harvested.

**St. Valery.** A good late variety. It grows long, shape uniform, tapering from a wide shoulder to a point.

**Long Orange.** The most popular of the older sorts for farm use on mellow soil. An improvement obtained by years of careful selection of the best formed and deepest colored roots.



CHANTENAY

## CARROTS

**Half Long Scarlet Carentan.** A forcing variety, cylindrical in shape, about four inches long and one inch thick, very stumped with small rat tail and fine small tops.

**Coreless.** A fine half-long early carrot. Medium sized, even shaped and productive. Blunt base and small tap root. Small fine tops and a nice smooth skin. The flesh is a rich orange red, finely grained and very free from the woody yellow heart or core found in most red fleshed carrots.

## CARROTS—For Stock Feeding

**Improved Short White or Mastodon.** One of the heaviest cropping carrots grown, yielding more tons to the acre than most any other sort. Flesh white, crisp and solid, very sweet in flavor. Quite an improvement on the White and Green Belgian sorts. Roots short and very heavy at the shoulder, rendering them easy to harvest. Roots frequently measure fifteen to twenty inches in circumference.

**Large White Belgian.** This carrot grows a third or more of its length above the surface. Roots will average two inches in diameter at the shoulder and a foot or more in length. The diameter is even throughout the entire length, the roots tapering gradually at the base. They are easily pulled in harvesting, and do not have to be dug out, like most long-rooted sorts. Flesh and skin pure white, though the latter is occasionally tinged with green in upper portion growing above the soil.

**Large Orange Belgian.** This is similar to the preceding in growth and form, but flesh and skin of the portion growing below the soil are of a pale orange coloring. These two varieties have probably been grown more extensively than any others for stock feeding in the past but are destined to be superseded to a great extent by the large, thick roots of the Improved Short White variety offered above, and the thick, stump-rooted table sorts.

**Large White Vosges.** A pure white carrot, six and one-half to seven inches long, four to four and one-half inches at the shoulder, tapering in a straight line to tip. Easily harvested on account of its wedge shape.

## CARDOON

**Smooth, Solid Cardoon.** Grown for the mid-ribs of the leaves which possess an unusual delicacy of flavor when thoroughly blanched and used in the same manner as celery. The root is also excellent when properly cooked.

## CHERVIL

A hardy annual worthy of more general use for flavoring and garnishing. The curled variety is even more beautiful than parsley.

**Curled.** Greatly superior to the old plain variety, being earlier, more handsome, and having fully as fine perfume and flavor.

## CHICORY

**Witloof Chicory or French Endive.** Grown for its use as a salad, the blanched head resembling Cos Lettuce in appearance. The seed planted in late spring give parsnip like roots by late autumn. The roots are then placed in earth where there is some heat, as in the greenhouse boiler room, or a warm cellar. The root then throws out the blanched salad head.

**Large-rooted, or Coffee.** Our stock is the improved type, with very much larger, smoother, whiter and proportionately shorter roots than the old kind. The dried and prepared roots are used quite extensively as a substitute or adulterant for coffee and the leaves used as a salad.



WITLOOF



CORN SALAD

## CORN SALAD

**Fetticus, or Lamb's Lettuce.** This small salad is used during the winter and spring months as a substitute for lettuce, and is also cooked and used like Spinach. In warm weather the plants will mature in four to six weeks. Sow the seed in shallow drills about one foot apart. If the soil is dry it should be firmly pressed over the seed in order to secure prompt germination. On the approach of severe cold weather, cover with straw or coarse litter. Like most salad plants, greatly improved if sown on very rich soil; indeed, the ground can scarcely be made too rich for them.

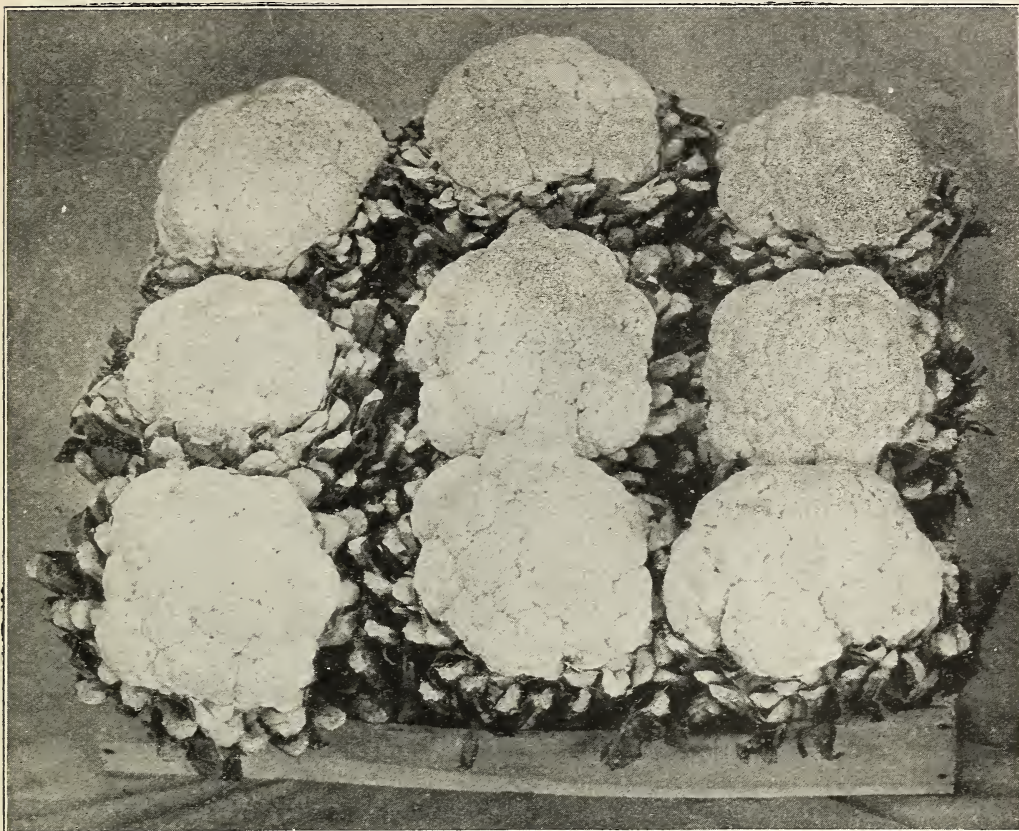
## COLLARDS

A form of cabbage or kale much grown throughout the South. It produces large leaves and at times a modified head on a tall stout stem. Freezing does not injure but rather improves the quality.

**Georgia, Southern or Creole.** We offer the true white or green stemmed sort.



## CAULIFLOWER



LEONARD'S SNOWBALL CAULIFLOWER

**Culture.** Cauliflower, while it resembles cabbage and requires very much the same treatment as outlined under and for cabbage, is not so hardy as cabbage, needs more water, needs more cultivation and requires generally treatment superior to cabbage. Cauliflower cannot be expected to mature satisfactorily in hot, dry weather, and as it requires 110 to 150 days for different varieties to mature, its planting should be correctly timed. Start cauliflower under glass or where cabbage plants can be wintered, winter cauliflower. One ounce gives 2500 plants and one-fourth to one-half pound of seeds plant an acre. When the head or heart of cauliflower, as you may think or feel of it, called the "curd," appears, tie the outer leaves over the head or pin these leaves with wood pins or beef skewers so the leaves will shade and blanch the curd and then cut the curd before it starts to branch. Remember that all the enemies of cabbage emphatically attack cauliflower and are to be combatted in a like manner.

**Leonard's Snowball.** The leading Cauliflower at Chicago and unquestionably the purest strain of "Snowball" Cauliflower seed to be had. Heads uniform; of desirable market size and of snowy whiteness.

After many years' competitive tests it is pronounced by expert cauliflower growers to be the best for both early and late planting. Successful frame growers of cauliflower say that under glass culture our Snowball outclasses any strain of cauliflower seed known to them. There are many expert cauliflower growers at Chicago, none better anywhere that we are aware of. Other strains of Snowball seed are well known to them and this strain of ours is their favorite for early, for late and for forcing. Strong recommendations surely.

**Danish Dry Weather.** Produces solid pure white heads considerably larger than Leonard's Snowball but is about a week later. This variety is especially adapted for growing in dry sections where nearly all other varieties fail to make good heads, but does equally well in all weathers.

**Large Early Erfurt.** This is a vigorous growing, hardy variety, with large, white, firm heads. It is the very best sort for late spring.

**Extra Early Paris.** This is a good early sort, and in a good season does well. Not as sure a header as the higher priced varieties.

**Autumn Giant.** A late sort of fairly good quality. Will do well under favorable conditions.

**Late Algiers.** An unsurpassed variety for planting in the South. It will head when others fail. The plant is large, but of upright growth, the leaves protecting the head so that they will endure uninjured a frost that would ruin other sorts.



## CELERY

Press celery seed into the ground, do not try to cover it, and when seed is kept wet and not above 60° F. germination occurs in ten to twenty days. Celery needs four to five months from seed to use, so very early celery should be started in hotbeds after January, and when two inches high transplanted or thinned to a space of two inches. Later trim the tops to produce stocky plants and when five inches high set where plants are to mature, first trimming off one-third of the roots and leaves. Celery seed may be planted out of doors north of the Ohio in April and treated as outlined above. Given sufficient water, celery can be grown on any good garden soil and one ounce of seed gives about 6,000 plants.

When almost grown, celery must be blanched; that is, the light is excluded from the edible stalk by the use of boards, earth, paper or other covering. If boards are used rows can be set as close as thirty inches, if earth blanched forty-eight inches or more is better. Set the plants six inches apart in the row and press the soil firmly about the roots. Again celery is set in solid beds eight inches each way, and the shade of the crowded bed does the blanching. With a few stalks in a garden a tile set over the plant or a wrapping of paper answers the purpose. If earth is used in blanching it should be drawn about the plant to one-third its height and repeated twice a few days apart till leaves only are exposed. Do not cultivate, hill or disturb celery when damp or rust may occur. In this hilling with earth called handling, place a peg at end of row with string to it and pass string about each plant so as to prevent earth from falling into the heart during the work. To store, celery should be only partly blanched.

Celery matures best in cool moist weather, so the grower farther south may delay this planting calendar to fit his own market and convenience.

### Golden Self Blanching.

The best of all early self-blanching varieties. First introduced in America in 1884, this is decidedly better in quality than the White Plume. It is ready for use nearly as early, blanches as easily, and is larger in size as well as finer in quality. It is of dwarf compact habit, with thick, solid, heavily ribbed stalks which blanch easily to a clear waxen yellow.

**Henderson's Easy Blanching.** Excels in the qualities that give self-blanching celeries their value. It bleaches earlier and quicker than any of this class; it is the longest keeping variety grown (if put away green), excelling in this respect every other sort.

**White Plume.** This is the earliest and most easily blanched, but does not keep well taken from the trenches. The plants grow rapidly and blanch easily during the summer months. Later in the fall the central stalks and leaves are of pure snowy whiteness even without earthing up.

**Columbia.** A desirable early maturing variety, following in season Golden Self Blanching, which it resembles in many respects. The stalks are of medium height, very thick, round and crisp, blanching to a light golden yellow. It is unsurpassed for its distinct, rich, nutty flavor.

**Winter Queen.** This is, without doubt, the most valuable variety of celery for winter and spring use ever introduced, even excelling the celebrated Perfection Heartwell as a late winter keeper. It is also much stouter, thicker and heavier, with double the amount of heart of any known celery.

**Dwarf Golden Heart.** A variety of sturdy, dwarf habit. It is solid, an excellent keeper, and of fine, nutty flavor.

**Boston Market.** For many years one of the most popular sorts in the markets of Boston. Instead of a single large heart it forms a number of smaller ones, which are very white, and remarkably tender and crisp. The best variety for light soils.

**Giant Pascal.** This is a green leaved variety developed from the Golden Yellow Self Blanching, and is an excellent sort for fall and winter use. It blanches to a beautiful yellowish-white color, is very solid and crisp and of a fine nutty flavor.

**Giant Golden Heart.** This variety attains a large size, but still remains crisp and tender. It is a fine keeper and is a favorite on the Chicago market.

**Perfection Heartwell.** A fine flavored, crisp and tender variety. The plants are a little taller than Crawford's Half Dwarf and a little later in maturing. The stalks are of medium size, round, very solid, crisp, tender, white and of exceedingly fine and nutty flavor. This has long been a standard variety and is yet one of the favorite sorts.

**Dwarf White Kalamazoo.** Dwarf, white; stiff close habit; solid, crisp.

**Celery Seed for Flavoring.** Not to be used for seed, but for flavoring soups, etc.



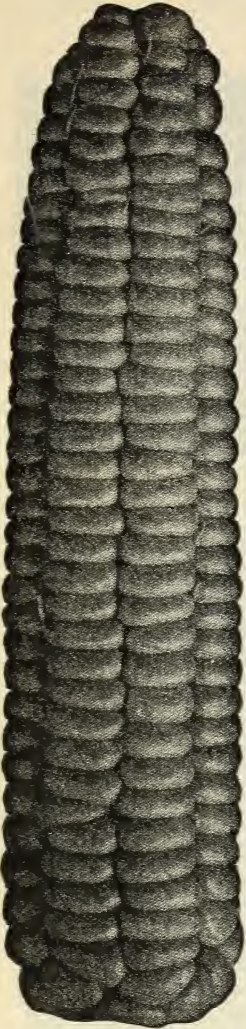
GOLDEN SELF-BLANCHING

## GERMAN CELERY OR CELERIAC

**Large Smooth Prague.** Has a large smooth root, and is the finest of all celeriac.



## SWEET CORN



**GOLDEN BANTAM**

**Culture.** Plant corn every two weeks for a continuous supply and north of the Ohio from late April to late July. Plant corn in three or four foot drills, dropping a grain every eight or sixteen inches, or plant in hills three or four feet each way, giving six grains to the hill, and later thinning to three stalks. Corn should be planted about one inch deep, planted deeper in sand than in heavy clay, planted deeper later in the year when the soil is warm; dwarf varieties closer together than the larger ones and a given quantity of seed of a small grained variety plants a larger area than does a like quantity of the large grained. One quart generally plants two hundred fifty hills and one peck is necessary to the acre. Plow deeply for corn, cultivate shallow and pick corn before it is too old. If the goodness of new corn tempts a too early planting, do not blame the resulting failure on your seedsman.

**Leonard's Early.** The earliest white Sweet Corn on the market. Seed planted May 15th produced roasting ears by August 1st. A large splendid ear, 12 rows, pure waxy white with deep grain and small cob of excellent quality. Should be planted in every garden.

**Golden Bantam.** A very early sweet corn with golden yellow grain, very tender and of excellent quality. The ears are six to seven inches long and of the medium size found most suitable for the table. The flavor is exceptionally rich and delicious. Height about four feet.

**Bantam Evergreen.** A cross between Golden Bantam and Stowell's Evergreen. Ears 8 inches long, 12 to 14 rowed; matures with Howling Mob; grain rather broad and deep, and of a rich golden-yellow color.

**De Lue's Golden Giant.** The originator claims that this variety is fully as early as the Golden Bantam, but is of better quality and double the yield.

**Early Cory Red Cob.** This variety is the favorite for first early, and no other variety has proved earlier.

**Peep O' Day.** A very early variety, producing ears five inches long, eight to ten rows to the ear.

**White Cob Cory.** This is an improvement over the Early Cory, as the cob is white, which gives it a finer appearance. It is as early as the Early Cory and of excellent quality.

**Chicago Market or Ballard.** This is the largest and best early corn in existence, twelve rowed, white cobbled and of exceedingly fine quality.

**Mammoth White Cory.** The ears are twelve rowed, much larger than the old Cory, white cobbled, and covered with very large white grains of good quality.

**Mayflower.** One of the whitest and sweetest of the early varieties; an exceptionally good yielder and one that deserves to be planted to come in ahead of Golden Bantam; ears average eight inches with deep kernel.

**White Mexican.** White Mexican is a heavy yielding, early maturing sweet corn. It ranks in a class with White Cob Cory and is a better yielder. Height four feet; ear about six and one-half inches long. Quality good.

**Premo.** Is a "sixty-day" sweet corn. It not only combines all the merits of the leading early varieties, but it is also really superior to them all in size, quality and yield.

**Howling Mob.** One of the finest second early, large eared sorts, very productive, white, and of excellent quality. Ears seven to nine inches long, twelve to fourteen rowed.

**Extra Early Adams.** This is an extra early field variety, but it is much used as an early market variety, being sweet and juicy.

**Perry's Hybrid.** An early variety of splendid quality. Kernels tinged with pink when ripe, with white cob.

**Early Minnesota.** One of the standard early sorts. Ready for market two weeks later than Cory or Chicago Market.

**Crosby's Early.** An early corn of large size and choice quality. It has long been a standard variety.

**Kendall Early Giant.** A valuable early sweet corn. The ears grow to a tremendous size, measuring eight to ten inches long, and having ten to eighteen rows on each cob, the majority having twelve rows; kernels pure white, sweet, tender.

**Champion.** This corn is unsurpassed for market use, owing to its large size and fine appearance. It is medium early, coming in at the same time as Perry's Hybrid. It is fourteen rowed and a splendid cropper.

**Early Mammoth.** Closely resembles the Late Mammoth, but is a little smaller, and about two weeks earlier. Of good size and quality.

**Potter's Excelsior or Squantum.** Fine, large ears and deep grain; one of the sweetest varieties.

**Mammoth Sugar.** A large late variety having ears of mammoth size, fourteen to twenty rows. Quality excellent, not exceeded by any variety. A good canners' variety, being white grained and very uniform. A week later than Stowell's Evergreen.



## SWEET CORN



EARLY EVERGREEN

**Early Evergreen.** The ears of this corn grow eight inches long, are mostly fourteen to eighteen rows. This is a magnificent kind for market gardeners and for main crop in every home garden. It ripens ten to twelve days in advance of Stowell's Evergreen and is equally as good for all purposes. The kernels are very sweet and tender, and when eaten from the cob break off free from husky tips so common to some otherwise fine table corns.

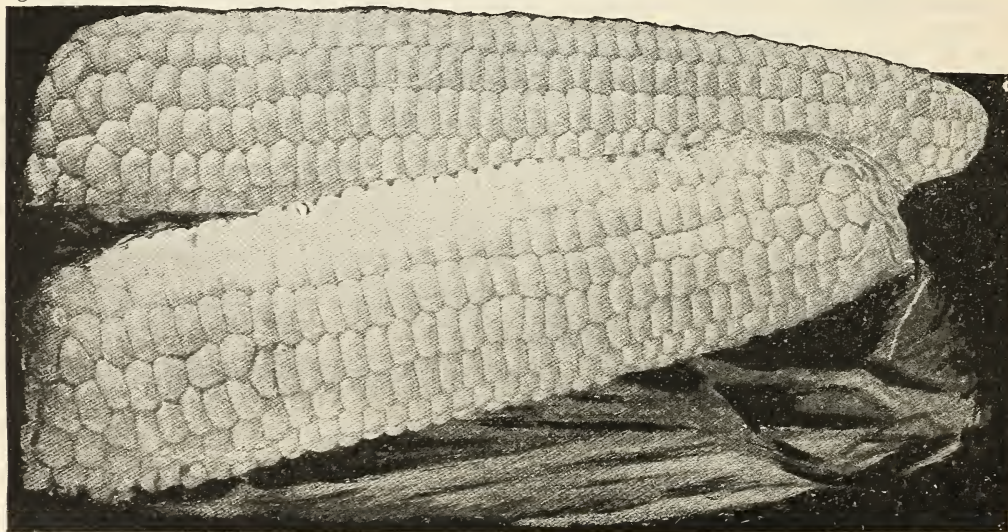
**Hickox.** Earlier than Stowell's Evergreen, and makes a large attractive ear of white and handsome grain. Very prolific; ordinarily every stalk will have two large, fully developed ears. The best sort for drying.

**Old Colony.** This variety is two weeks earlier than the Evergreen and almost as large. It is considered the best and sweetest by canning factories. A fine paying variety for market.

**White Evergreen.** This is a high-bred white type Stowell's Evergreen. It has been developed by careful work, only the finest white-eared product being saved and selected each season. The stalks are of strong, vigorous growth, six to seven feet high.

**Country Gentleman.** We have a stock of this excellent sweet corn that is exceptionally good. There is no sweet corn that compares with the Country Gentleman for sweetness. It is the variety par excellence where quality is desired. Market gardeners who make a specialty of growing for hotels and high class restaurant trade use this as a main crop variety in preference to any other. For home use it will be found superior and it is very productive. The fact that it is a favorite variety with canners proves its merit.

**Stowell's Evergreen.** This standard main crop variety excels all other late sorts in sweetness and productiveness. It is more popular than any other for canning, for marketing and for the home garden. Great care has to be exercised in the selection of stock to grow seed from, as this variety has a tendency to deterioration and a shorter grain, which makes it less sugary and desirable.



STOWELL'S EVERGREEN



## SWEET CORN

### LEONARD'S SWEET CORN—Narrow Grain

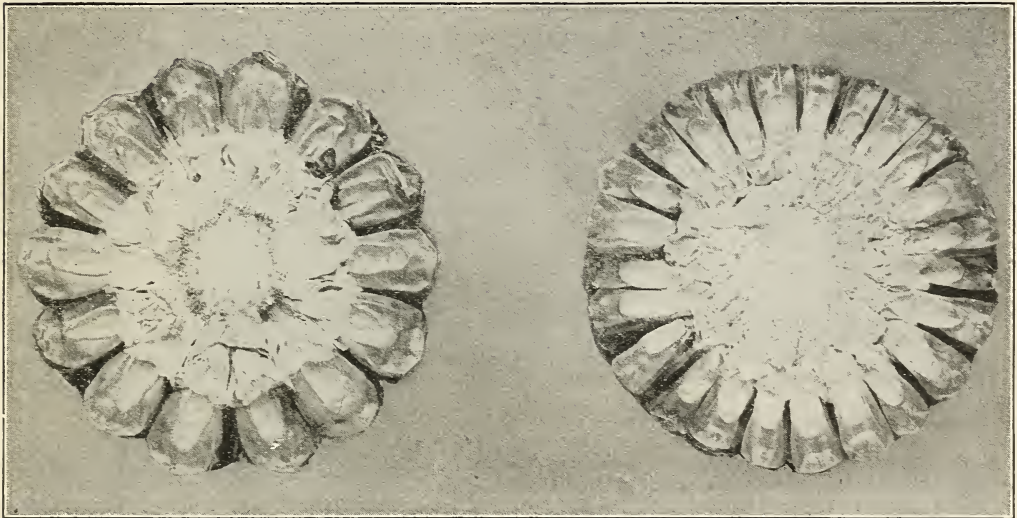
**THE FINEST AND MOST PROFITABLE MAIN CROP  
SWEET CORN OFFERED TO THE PUBLIC TO DATE.**

This corn has the size of ear of Stowell's Evergreen. Has twenty to twenty-two rows—kernels long, narrow and of excellent flavor. The cob is exceedingly small for the size of the ear.

Originally introduced as a canning variety, LEONARD'S CORN (Narrow Grain) has proven an all around main crop for market growers and home gardeners, as the flavor cannot be equalled even by Country Gentleman.

For canners, the deep kernels and fine flavor make a Country Gentleman or Shoe Peg pack. From a tonnage standpoint it makes a hit with the farmer who has grown Country Gentleman for the factory. All points considered, LEONARD'S SWEET CORN is the one best buy to be had. See the comparison in the illustration—THE EXTREME NARROWNESS OF GRAIN—GREAT DEPTH—FREENESS FROM STARCH. In the sectional cut note the small cob and count the number of rows.

**QUALITY    +    TONNAGE**  
**AND IT ALWAYS RUNS TRUE TO FORM**



**STOWELL'S EVERGREEN**  
Natural Size

**LEONARD'S SWEET CORN, NARROW GRAIN**  
Natural Size

**Black Mexican.** This corn, when in condition for the table, cooks remarkably white; but the ripe grain is black or bluish-black. It is surpassed by none in tenderness. For family use it is considered by many the most desirable of the medium late sorts. It does especially well for second early in the South.

## CRESS

**True Water Cress** can be easily grown by sowing the seed broadcast on garden soil and keeping the soil very wet till the plants are big enough to transplant to shallow indentations about five inches deep here and there along the sides of a clean flowing stream. There it will continue to spread by the lengthening of its roots, also by reseeding and requires no further care. The crop can be grown to maturity in wet garden soil, or the seed can be sown directly to the mud along the stream, but with lesser measures of success. April or September is a good time to plant these minute seeds, and this aquatic prefers to stand with its roots and most of its stems submerged. Cutting can begin in about sixty days, and a little later frequent cutting, using a sharp knife, will stimulate plant growth.

**Curled or Pepper Grass.** A pungent, quick-growing plant that poorly parodies the water cress flavor, can be grown in any garden soil as soon as the ground can be worked. Plant one-half inch deep in one-foot rows, thinning the plants to four inches.

## DANDELION

**Improved Thick Leaved.** One of the earliest and best greens in cultivation.

## CUCUMBER

**Culture.** Not before corn planting time plant cucumbers out of doors in drills or hills one-half inch deep. The crop may be advanced two weeks by starting in the hot bed or greenhouse on inverted four-inch sods covered with leaf molds. The plant will appear in four to eleven days and in three weeks from seeding, when the plant has two to four leaves, it is ready to transplant outside.

Mark the field up and down hill, then furrow across its face in a four-foot check and at each intersection drop manure or fertilizer or, better, both. Throw earth to this intersection to form an elongated hill four inches high. Plant the seed like a short drill, not haphazard; then later two strokes of the hoe cleans this short drill.

Be generous. Use a dozen seed to a hill, and after the striped beetle has his toll, thin to three plants to a hill. To check the beetle, use on foliage, but not too heavily, road dust, ashes, soot, air slaked lime, bone flour, tobacco dust or arsenate of lead; pull earth about the stem to cover the hill with netting.

Cultivate as long as possible. Cut the cucumbers. Do not pull or bruise them and to keep the plants bearing, cucumbers must not be permitted to ripen.



CHICAGO PICKLING

**Chicago or Westerfield Pickling.** A variety esteemed above all others by Chicago market gardeners and extensively grown for the large pickling establishments in this vicinity. Fruit medium length, pointed at each end, with large and prominent spines. Color a deep green. It combines all the good qualities of an early cucumber.

**Snow Pickle.** A choice pickling variety, similar to Chicago Pickle.

**West India Gherkin.** A very small, oval, prickly sort, distinct from all others.

**Early Cluster.** Vines vigorous, producing the bulk of the crop near the root and in clusters.

**Green Prolific or Boston Pickling.** A favorite with pickle growers and commercial gardeners, and good for table use.

**Early Frame or Short Green.** An excellent sort for table use and for pickling. Fruit straight, handsome, smaller at each end, bright green; flesh tender and crisp and makes fine pickles.

**Everbearing.** Small size, very early and enormously productive, and valuable as a green pickle. It continues to flower and produce fruit until killed by frost.

**Improved Long Green.** Not so abundant a bearer as the preceding sorts, though recommended to all who put up their own pickles. Fruit long and slim, not surpassed in quality by any variety.

**Nichol's Medium Green.** A valuable and handsome variety, in shape between White Spine and Long Green.

**Leonard's Greenhouse.** This is a stock of cucumber upon which we have spent much time. The seed we offer is of our own growing and the selection is from the finest types only. The value of it to market gardeners and greenhouse men who desire a uniform, deep green, extra long cucumber, will be appreciated as soon as tried.

**Early Improved White Spine.** One of the best sorts for table use. Vines are vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, dark green, with a few white spines; flesh tender and of excellent flavor.

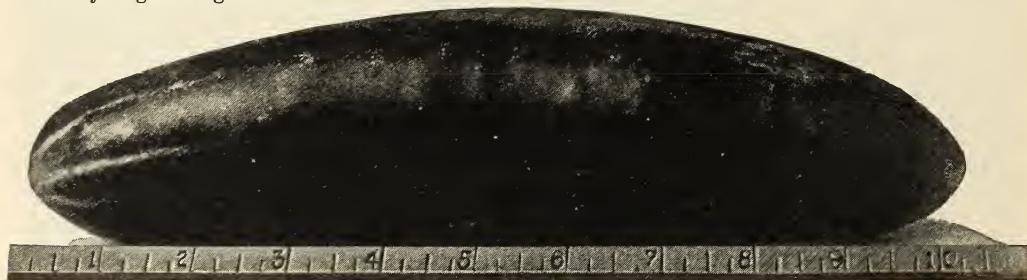
**Evergreen White Spine.** An improved strain of the well known White Spine, and a favorite with market gardeners, both for forcing and outdoor culture.

**Arlington.** A selection from the White Spine, being more pointed at each end.

**Davis Perfect.** In color, a dark glossy green; shape slim and symmetrical, with an average length of ten to twelve inches.

**Klondyke.** A medium early, very good strain of white spine; fruit attractive, full, uniform rather thick, short and blocky, tapering abruptly at both ends; color very dark green which it holds well.

**Fordhook Famous.** Of the true White Spine type. Vines produce an enormous crop, being of unusually vigorous growth.



DAVIS PERFECT



## CUCUMBER

**Early Fortune.** The finest market cucumber of the White Spine type. The fruits measure nine inches long and are slightly tapering. The thick flesh is pure white, firm and unusually crisp, with very few seeds. The fruits are of a rich, dark green color which does not fade when shipped to distant markets.

**White Wonder.** Fruit produced in clusters. Color ivory white from time of forming until maturity.

**Japanese Climbing.** While all cucumbers are running vines, yet this variety is much more creeping or climbing in its habit.

**Lemon.** This little cucumber is not half appreciated for the home garden. It has a most delicate flavor, and never gets bitter or unfit for the most demanding taste. The vines are prolific—the fruit is small and always in good condition.

## EGG PLANT

**Culture.** Treat the Egg Plant like a tender tomato that required even a longer period to mature. After cabbage plants are out of the hotbed or greenhouse, which is April north of the Ohio, sow egg plant, keeping even the night temperature above seventy degrees. One ounce of seed gives two thousand plants, and four pounds plant an acre. Transplant later to pots or to a three or four inch stand, and when corn is shoe high, put egg plant outside on rich, well drained land. Set the plants two feet apart in four-foot rows, shading or watering the plants if it is sunny or dry.

**Leonard's Improved New York Purple** (Spineless). Very large and smooth, fine dark color. Ours is the spineless plant, most preferred by our market gardeners, both east and west. We have made the most careful selection possible of our stock plants, and know it to be unsurpassed for the market.

**Black Beauty.** The fruits are rich dark purple, large and symmetrical, maturing a little earlier than Improved New York Purple but usually not quite as large. A very desirable sort for the market as the fruit holds its color a long time.

**Black Pekin.** A fine variety, bearing large, round deep purple fruits, fine grained, and of superior quality.

**Florida High Bush.** The fruits of this variety are borne higher off the ground than other varieties, which is advantageous in keeping out "rot" and "blight." The plants are strong and stand unfavorable weather conditions remarkably well. The fruits are of uniform dark purple color.



LEONARD'S IMPROVED NEW YORK PURPLE EGG PLANT

## ENDIVE

**Culture.** Endive, or winter lettuce, used as a salad, as greens or garnishing, is usually planted one-fourth inch deep in a seed bed in mid-summer, and when convenient after a month transplanted to stand one foot apart in eighteen-inch rows. When almost grown and about two weeks before ready to use, it is blanched by tying the leaves together with soft cord, or the blanching is done by turning a flower pot or tile over each plant, or by blanching with earth, like celery. The blanching removes the green plant's acrid taste. The plant may be, but seldom is, used as an early spring crop. Three to five pounds of seed plant an acre.

**Green Curled.** Beautifully curled, tender and crisp.

**Moss Curled.** More finely curled, and a heavier and more dense plant than Green Curled.

**White Curled.** Very tender when cut young; blanches readily.

**Broad-Leaved Batavian.** (Escarrole.) This variety is chiefly used in soups and stews; requires to be tied up in blanching.

**French Endive.** See Witloof Chicory.



ENDIVE—  
GREEN CURLED



## MEDICINAL, AROMATIC AND POT HERBS

In borders and irregular parts of the garden it will prove profitable and pleasureable to grow a few herbs. Their use gives new and unusual flavors, pleasing aromas and perfumes, and some medicines that are as serviceable as can be purchased. Exact cultural directions suited to them all is impossible. Give them generally the care given vegetables or flowers. Where the foliage is to be used cut the young stems on a dry day, wilt in the sun, dry in the shade and either hang up in bunches or store in air-tight glass jars.

**Anise.** A hardy annual used for medicinal purposes and for seasoning and flavoring.

**Balm.** A perennial used for a medicinal tea, and a beverage of lemon-like flavor.

**Basil, Sweet.** An annual used for seasoning sauces, soups and meats.

**Borage.** A hardy annual grown for bee pasture; also used as a flavoring.

**Caraway.** In its second year this biennial produces seed for flavoring pastry, etc.

**Catnip.** Perennial. The leaves are used for seasoning.

**Coriander.** An annual grown for the use of its seed in confectionery and liquors.

**Dill.** The seed and foliage of this annual is used for flavoring, as in "dill pickles."

**Fennel, Sweet or Common.** Foliage used as a salad and the seed for flavoring.

**Fennel, Florence.** An annual grown for the blanched base of its stem, which when cooked has a sweet taste, a delicate odor and somewhat resembles celery.

**Horehound.** The leaves of this perennial are used in medicines for coughs and colds.

**Hyssop.** A perennial grown for the use of its foliage in medicine.

**Lavender.** A hardy perennial grown for its fragrance.

**Sweet Marjoram.** Treated as an annual and the younger foliage used for seasoning.

**Rosemary.** A fragrant perennial used for seasoning and medicinal purposes.

**Rue.** A hardy perennial to be used with caution medicinally.

**Saffron.** An annual used for seasoning, coloring and making cosmetics.

**Sage.** The well known hardy perennial used for seasoning.

**Savory, Summer.** The foliage and flowers of this annual used for flavoring and seasoning.

**Thyme.** The leaves of this perennial are used for seasoning and medicinally.

**Wormwood.** Perennial. A plant of fragrant odor, but very bitter taste; the leaves are used as a tonic.

## GARLIC

A member of the onion family with a strong penetrating odor; not propagated by seed, but by dividing the bulb.

## HORSERADISH

Horseradish produces no seed, but is grown from pieces of the roots.

## KALE OR BORECOLE

**Culture.** In Virginia, kale planted in late August has some of its plants thinned out and sent to market within sixty days and the cutting then continues until the field is clean in April. Further north, kale is treated like the cabbage; that is, planted early in spring in hotbeds or out of doors, and it is used in the fall when light frosts have improved it. Kale is sown in two and three-foot drills and then thinned to six to twenty-four inches, according to varieties. One ounce sows generously one hundred yards and four pounds plant an acre.

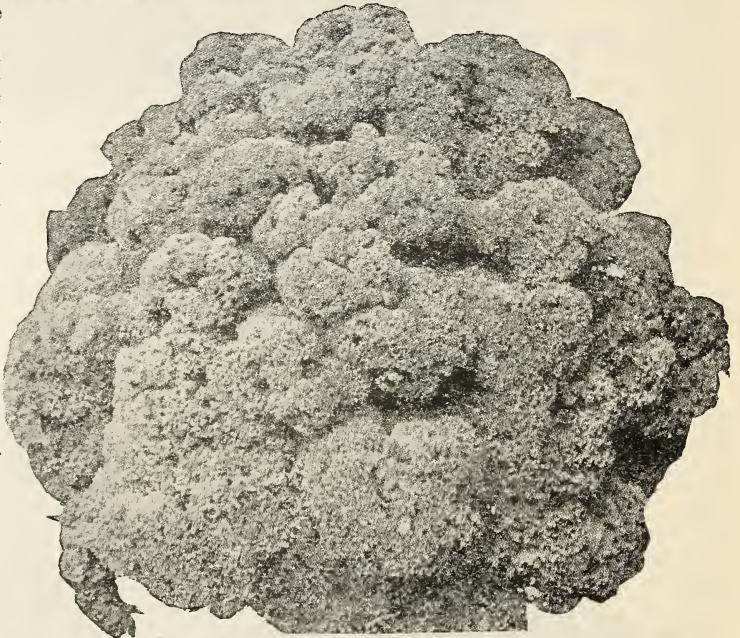
### Dwarf Curled Scotch

Plant low and compact, but with large, bright, deep green leaves, curled, cut and crimped until the whole plant resembles a bunch of moss. One of the best sorts for use, and when well grown and cooked is one of the most palatable of vegetables.

**Tall Green Curled Scotch.** This is very hardy and is not injured by a moderate frost. About thirty inches tall, with an abundance of dark green leaves which are densely curled and cut, forming a very beautiful plant. It stands the winters in the Middle States without any protection.

**Siberian.** Sometimes called Sprouts. In this variety the very large, green leaves are comparatively plain in the center but coarsely cut and frilled on the edge. The plant is low but spreading and very hardy.

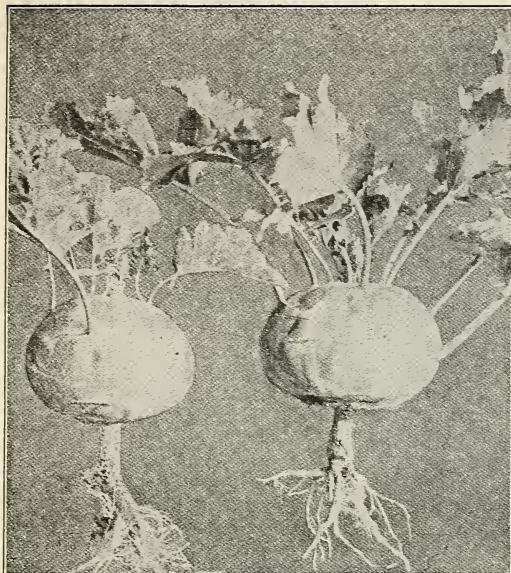
**German Dwarf Purple.** Similar to the Dwarf Curled Scotch, but of a rich purple color.



DWARF CURLED SCOTCH



## KOHL-RABI



**EARLY WHITE VIENNA KOHL-RABI**

soil can be worked in spring. Thin the plants to a stand of four to six inches in twelve to eighteen inch rows. It is advisable to throw earth to the plant to blanch it, very much as celery is blanched.

**London Flag.** This is the variety generally cultivated in this country. It is hardy and of good quality.

**Large American Flag.** A variety which has become very popular with some market gardeners on account of its being larger than the London Flag.

**Large Musselburg.** The largest variety, often three inches in diameter and becoming very white and tender. A hardy and desirable sort.

**Monstrous Carentan.** The favorite market variety, large, thick stem, of mild flavor and attractive appearance.

**Culture.** This relative of the cabbage, that looks like a turnip that grew above the ground, can be treated very much as either cabbage or turnips. One ounce sows one hundred yards and four pounds plants the acre. Sow in eighteen to twenty-four inch rows, thin to four inches apart and use for the table when small. Like the turnip, we cannot expect good kohlrabi in the summer heat, but a planting made about August first north of the Ohio will give a crop for winter storage. Do not overlook the value of this plant as a stock food.

**Early White Vienna Forcing.** An extra early variety ready for table seventy-five to eighty days after planting. Has very few short leaves, and the bulbs are very sweet and tender when two and one-half to three inches in diameter.

**Early Purple Vienna Forcing.** Bluish purple; similar to above, except in color.

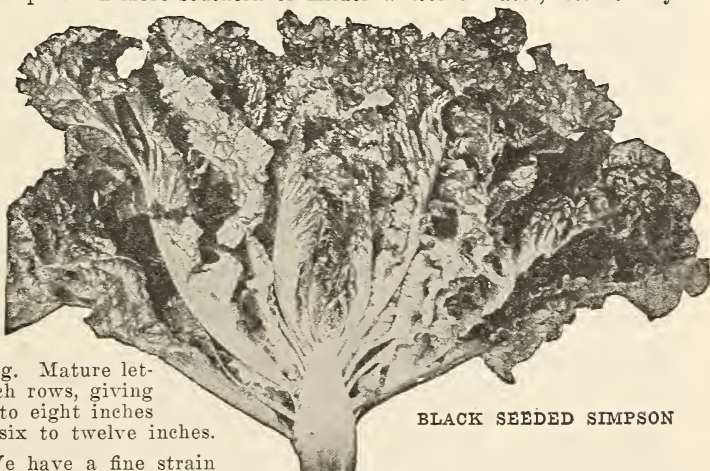
**Large Green.** Hardy, quite late, and used for feeding stock. Bulbs large, weighing eight to ten pounds, whitish green in color; leaves large and numerous.

## LEEK

**Culture.** This mild member of the onion family is used in soups and salads. Sow one ounce to one hundred feet of row and four or five pounds to the acre, one-half inch deep, as early as the

## LETTUCE

**Culture.** As lettuce will stand considerable freezing, it may be seeded or transplanted out of doors as soon as the soil can be worked in spring. For a succession, replant every three weeks till within sixty days of freezing weather. The soil cannot be made too rich and this crop must be grown quickly and unchecked to be of superior quality. North of the Ohio lettuce is frequently started under glass like cabbage in hotbeds; in February transplanted to cold frames and hardened to be set out of doors in early April. In more southern or milder winter climates, lettuce may be sown in autumn, protected with sash or coarse litter and in late winter transplanted, or thinned and matured where planted. When the crop is matured under glass it requires much ventilation and little heat, and beware of too much water in cloudy weather. In the summer's heat canvas or a slatted half shade and plenty of water is of value. One ounce of seed gives two thousand plants and three pounds plants an acre. In the seed bed drop twenty-five seed to the foot, and gently rake it in; failure may result from too deep a covering. Mature lettuce in twelve to eighteen inch rows, giving the loose leaf varieties three to eight inches in the row and head lettuce six to twelve inches.



**BLACK SEEDED SIMPSON**

**Black Seeded Simpson.** We have a fine strain of this lettuce carefully selected. This is the most popular loose-leaved sort.



# LETTUCE



**BIG BOSTON**

**Grand Rapids Forcing.** Preferred by a great many to the Black Seeded Simpson, on account of being a tougher leaved lettuce.

**Early Curled Simpson White Seed.** Forms a close, compact mass of curly yellowish green leaves. Earlier than the head varieties.

**Early Curled Silesia.** A very early tender sort, with fine curled leaves.

**Denver Market.** This is a fine crisp, crumpled head variety.

**Prizehead.** Is a curled or crisp non-heading variety, medium size, light brown on a medium green base. It is one of the best home garden varieties, as it grows quickly and makes a lot of good eating leaves, which are of remarkably good flavor. The name is misleading, as it is a strictly non-heading variety.

**Improved Hanson.** Heads very large, from two to three pounds each; hearts quickly and stands the summer well; quality excellent.

**Iceberg.** A beautiful lettuce. Large, curly leaves of bright, light green, with a very slight reddish tinge at the edges.

**Boston Market.** Also called White Seeded Tennis Ball. The best of the head varieties for forcing.

**Tennis Ball B. S.** Practically the same as Salamander. It is a cabbage butter head of medium size and good green color. Leaves are straight but crumpled and forms a good solid head. This lettuce does well in almost any weather and is a good variety of fine quality.

**St. Louis Butter.** The most popular and satisfactory head lettuce. It forms a fine head, is tender and crisp, and is very slow to run to seed.

**All Seasons.** One of the best all head lettuces.

**Royal Summer Cabbage.** A very reliable heading sort with glossy deep green leaves, the outer ones being slightly spotted with brown; the inner leaves form a large solid head light yellow in color, tender and buttery.

**The Leonard Lettuce.** Cabbage head is the head lettuce for early and late summer planting. Produces a very fine early large solid head, color a fine light green, free from spots. Small ribbed leaves that are very tender and crisp. Too much cannot be said about our stock, which is very true to type. As this variety withstands the heat far better than Big Boston, it is a very great favorite with our market gardeners for early and late planting.

**Big Boston.** This variety is identical in color, shape and general appearance with the famous Boston Market Lettuce, but is double the size.

**White Summer Cabbage.** A very old sort, medium in size, medium green and crumpled. This variety is a very good quality cabbage or butterhead.

**The Deacon.** A magnificent butterhead lettuce.

**May King.** Plant this lettuce for the first early head lettuce. It is equally good for outdoor planting or forcing. The outer leaves have a slightly brownish tinge, while the heart is a beautiful yellow, very crisp and tender.

**New York or Wonderful.** One of the very best of the curled or crisp heading varieties. The head, at first pointed or conical, becomes globular at maturity and is of medium large size, dark green in color and slightly curled on edges. Heads are very hard and well blanched. Quality is excellent, being sweet yet never buttery in flavor.

**California Cream Butter.** A grand, good butter lettuce.

**Salamander.** This will stand the summer heat better than any other variety.

**Oak Leaved.** Leaves light green, oak shaped, slightly curled, set close, having no coarse stems; of fine flavor and extreme tenderness.

**Philadelphia Butter or Early White Head.** An excellent variety for spring or fall market, producing large, solid heads which blanch readily. Crisp and of good flavor.

**Brown Dutch.** This variety is a good variety. Makes a round head tinged with red.

**Winter Lettuce.** A compact, solid, hardy lettuce for late winter or early spring use.

**Romaine or Paris White Cos.** The best known and most popular Cos variety in America. Is medium large, medium green. It forms a good well folded head of fine quality which blanches readily.

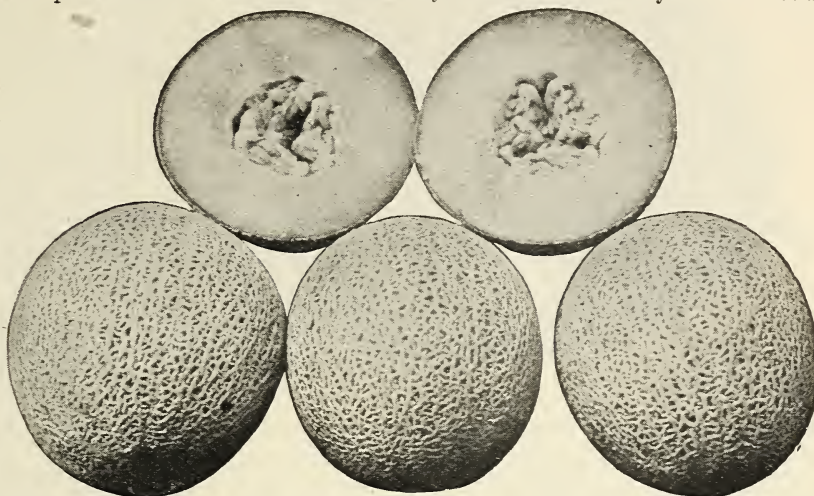


## MUSK MELONS—Green Fleshed

**Culture.** Musk melon, water melon, cucumbers, gourds and squash are known as cucurbits. For musk melon follow our cultural directions for cucumber except that where a robust growing variety of musk melon is grown, a space of as much as six by six feet is sometimes required between hills. One ounce of seed plants fifty hills, and three pounds plants an acre. The crop, or the last planting for a succession, should be in June, north of the Ohio. While not necessary, it is advisable to pinch off the branches of musk melon if a quicker matured or a large or a better fruit is required. Pick the melon when it parts from the stem without difficulty and store a few days in cool room.

### Rocky Ford.

This has become one of the most popular of small or crate melons and is shipped in large quantities from Colorado and Arizona. The vines are vigorous and productive. The fruits are oval, slightly ribbed, densely covered with fine netting. Flesh green, very sweet and highly flavored.



ROCKY FORD

**Rocky Ford—Pollock 10-25.** This melon is identical in shape and size with the Rocky Ford; the flesh is salmon tinted instead of all green. It is rapidly taking the place of the old green fleshed Rocky Ford.

**Delicious Gold Lined.** A new melon of fine uniform shape and without ribs; slightly oval; meat thick, green and light gold towards center.

**Jenny Lind.** Vines rather small and vigorous and productive. Fruits small, somewhat flattened; deeply ribbed and well netted. Flesh green and exceedingly sweet.

**Netted Gem.** The best early melon known. Shipped to every market of note, in great quantities, every year. Medium size, but of excellent flavor.

**Eden Gem or Netted Rock.** Highly esteemed on account of its rust-resisting qualities; is larger than the Rocky Ford, but not quite so early, although it bears longer and is more productive; very solid netting, with almost invisible ribs; nearly ball shaped, green flesh, and fine for home use or market.

**Early Nutmeg.** A very early green fleshed melon of excellent flavor.

**Extra Early Hackensack.** The fruits are nearly two weeks earlier than Hackensack, medium to large sized, nearly round or somewhat flattened, evenly and deeply ribbed and with very coarse netting. The skin is green, slightly tinged with yellow as the fruits mature. The flesh is green, a little coarse but juicy and sweet.

**Large Hackensack or Turk's Cap.** A very large, green fleshed melon. The vines are hardy, vigorous and productive. The fruits are nearly round, usually somewhat flattened; ribs are large and of irregular width, densely covered with coarse netting.

**Chicago Market.** This we consider the best Nutmeg for earliness of maturity, large and uniform size, thickly netted skin, small seed cavity, deep green flesh, juicy delicious flavor and freedom from rot. A favorite with all who prefer a green flesh sort.

**Early Green Citron.** The shape is round or slightly oval; the size is rather small; the netting heavy and the ribs are indistinct. The flesh is green and the melons mature very early. It is not a shipping melon, as it has no keeping qualities.

**Improved Cantaloupe.** A very long melon, large and with pink flesh. It is heavily netted and ribbed prominently. It is one of the largest of the pink fleshed sorts and is exceptionally sweet and spicy. However, it has no keeping qualities and must be consumed soon after picking. It is early in maturity but not widely used.

**Honey Dew.** The fruits are round and slightly oval, six to eight inches in diameter and weigh about six to eight pounds; the skin is smooth and when ripe is creamy yellow in color; flesh light emerald green, fine grained and of very sweet, sugary flavor. Rind thin but very firm and the fruits stand shipping remarkably well.

**Honey Ball.** A cross between Honey Dew and Texas Cannon Ball. Extremely sweet but lacking in flavor. Not as good a shipper or keeper as Honey Dew.

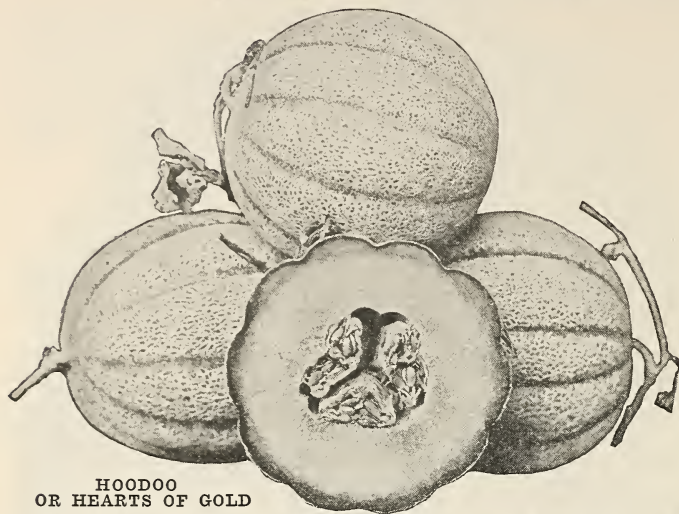
**Casaba Melon.** The Casabas are primarily for winter use. They require a long season for maturing but the fruits are exceptionally good keepers. The skin of the fruits is usually furrowed and they possess little or none of the common musk melon odor.

**Vine Peach.** Very similar to Garden Lemon and used for preserving.

**Ornamental Pomegranate.** A very interesting and handsomely fruited vegetable. Fruit similar to Vine Peach in size, color mottled and having a rich perfume.



## MUSK MELONS—Yellow Fleshed



**HOODOO  
OR HEARTS OF GOLD**

**Paul Rose or Petoskey.** A yellow fleshed sort of suitable size for a crate melon and of excellent quality. Vines vigorous and productive. Fruits oval, slightly ribbed and densely netted.

**Emerald Gem.** A very early, yellow fleshed melon of small to medium size. One of the very best for the home garden. Vines vigorous and productive. Fruits globular or slightly flattened, somewhat irregularly ribbed and very slightly netted.

**Osage Gem.** Skin is heavily netted like the Rocky Ford, flesh salmon colored and of the highest quality. This melon is very popular with many shippers as it carries well and really has a very wonderful flavor.

**Defender.** This is one of the best yellow fleshed sorts and in some respects is far superior to any of this class. The fruit is medium sized, oval in shape, slightly ribbed, covered with gray netting. The flesh is firm, fine grained, rich, deep yellow, darker than that of the Osage and of higher flavor.

**Osage, or Miller's Cream.** Is of medium size, oval in form, dark green in color, somewhat netted and slightly ribbed. The flesh is extremely and uniformly thick, of firm texture, rich salmon in color; highly flavored and delicious to the rind. Cavity very small. It is a remarkable keeper and a good shipping melon.

**Abbott's Pearly Pink.** A new variety with exceptional merit. The netting is very coarse and the skin is a beautiful shade of pearl, making the outside appearance very attractive. The flesh is deep and pink in color; the shipping qualities are excellent and wherever it has appeared on the markets has commanded a premium over other kinds. It is oval shape and slightly larger than a Rocky Ford.

**Banana.** A long salmon fleshed variety of good flavor, growing about fifteen inches long.

**Bender's Surprise.** A very delicious, large, salmon fleshed melon with superior shipping and keeping qualities. Very popular in the East.

**Admiral Togo.** This is an orange fleshed netted Gem or Rocky Ford.

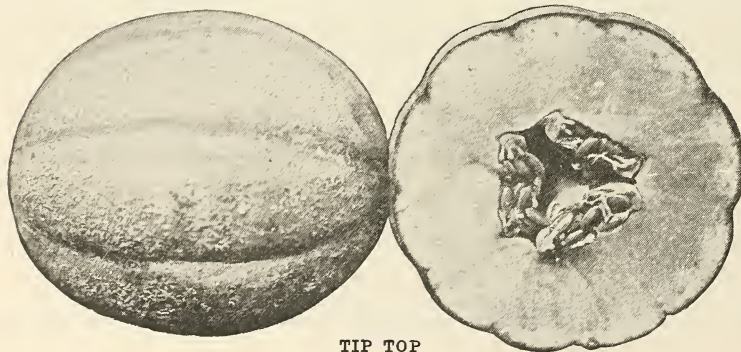
**The Princess.** This melon is one of the best for the home garden. In shape it is nearly round, with heavy netted dark green skin. The flesh is salmon color, thick, sweet and luscious.

**Hoodoo or Hearts of Gold.** An orange fleshed melon of medium size—fine for the home garden as a midseason sort, also ideal as a shipping melon, as the rind, although thin is very firm and is covered with dense fine netting. Vines are vigorous and resist blight well. Fruits are uniform, medium in size, nearly round. The flesh is thick, firm, highly colored and delicious.

**Burrell Gem.** The originator says: "The Rocky Ford melon with Golden Meat." This describes the melon fully, as in the outside appearance it looks just as the best types of green fleshed Gems, or Rocky Fords do, but has orange flesh inside.



**OSAGE OR MILLER'S CREAM**



**TIP TOP**

**Tip Top.** This very productive melon is of medium to large size, nearly round, slightly ribbed and fairly well covered with shallow netting. The flesh is deep yellow in color. The universal testimony of every one using Tip Top is that every fruit produced, whether big or little, early or late in the season, is a good one—sweet, juicy, finest flavor, firm, but not hard-fleshed, eatable to the very coating.



## WATERMELON

**Culture.** For watermelon, follow our cultural directions for cucumbers, except that it is necessary to give the watermelon a space of eight to ten feet between hills, and thin the plants to two to the hill. One ounce plants twenty-five hills and three pounds of seed plant an acre.



**GYPSY OR GEORGIA RATTLESNAKE**

**Gypsy or Georgia Rattlesnake.** One of the largest varieties and stands shipment long distances. Fruit cylindrical, square at the ends, smooth, distinctly striped and mottled light and dark green. Flesh bright scarlet and very sweet.

**Phinney's Early.** Few, if any, of the early sorts of recent introduction surpass this old favorite. It is the first to ripen, of good size and productive.

**Vick's Early.** This variety is prized for its earliness. It is oblong in shape, smooth with a very dark skin, rather small in size; flesh bright pink, solid and sweet.

**Cole's Early.** Very hardy, a sure cropper and extremely delicate in texture of flesh, which is of dark red color; rind is thin and extremely brittle, hence not desirable for shipping purposes, but possessing all the other most desirable features. We highly recommend it for home use.

**Harris Earliest Watermelon.** The best of the extra early sorts. Fruit slightly oval with irregular mottled stripes of light and dark green. Flesh bright red, sweet and tender. A desirable variety where the season is short. It is hardy, productive and the largest of the early kinds.

**Peerless or Ice Cream.** Medium sized with very sweet, scarlet flesh. A good variety for main crop.

**Sweetheart.** This melon is early, large, handsome, heavy and productive. The shape is oval and the color mottled light to a very light green. Flesh bright red, solid, but tender and very sweet.

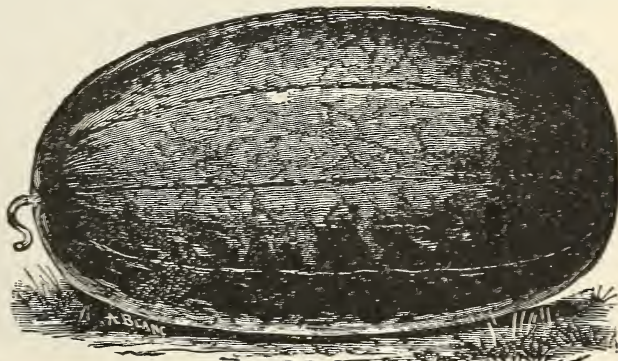
**Dixie.** A popular market sort. Vine vigorous, large growing and hardy; fruit medium sized to large, about one-third longer than thick. Color of skin dark green, striped with a lighter shade.

**Florida Favorite.** A very large, long melon mottled dark green with stripes of lighter shade. Rind thin but firm; flesh very bright, deep red, very sweet, tender and excellent.

**Hungarian Honey.** A very early sort; fine for northern latitudes; perfectly round; brilliant red flesh.

**Wonderful or White Seeded Kleckley's Sweets.** A very valuable melon, wonderfully productive, long, thick, uniform; color of rind, dark bluish green, flesh sparkling red, sweet and entirely free from hard centers.

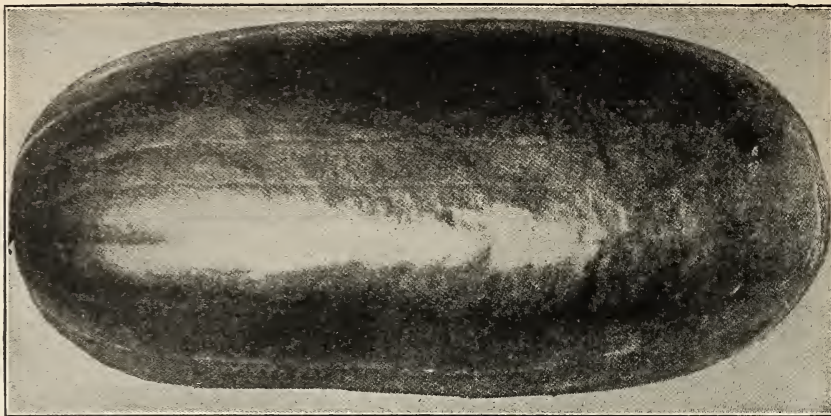
**Kleckley's Sweets or Monte Cristo.** Unsurpassed for home use or near markets. Vine vigorous and productive; fruit of medium to large size, oblong, tapering slightly towards the stem end, dark green, often showing fine russetting. Flesh very bright, rich red, exceedingly sweet. So crisp and tender that it will not stand shipping, the fruit bursting open if subjected to even a slight jar, or when the rind is penetrated with a knife.



**KLECKLEY'S SWEETS**



## WATERMELON



**TOM WATSON WATERMELON**

**Tom Watson.** A large melon similar in shape, and splendid quality to Monte Cristo but averaging larger in size and with a tougher rind, making it especially adapted for shipping. The rind is dark green with distinct fine veining; flesh is rich red, sweet and tender. Undoubtedly the best shipping melon.

**Alabama Sweet.** The melons are large, of oblong form and have a firm dark green slightly striped rind. The flesh is bright red and of delicious flavor. Seeds are white, one of the very best of the long melons for shipping purposes.

**Irish Grey.** The size is uniform and large. Color of rind yellowish gray and almost as tough as that of the Citron. Ripens earlier than Watson and will keep in good condition for a long time after picking. Very prolific and a good shipper.

**Angel's Kiss.** One of the best flavored sorts—flesh deep crimson, sweet and melting; oblong in shape; very prolific.

**Halbert Honey.** A variety somewhat similar to Kleckley's Sweets but of much darker color. The vines are very prolific and usually bear four or five very uniform melons. Quality the highest.

**Long Light Icing.** The skin is of an attractive mottled very light cream color, the flesh is deep red in color and of very fine quality.

**Dark Icing.** One of the most delicious fruits of round or shortened oval form with dark green skin, flesh deep pink, very sweet and melting.

**McIver's Wonderful Sugar.** Without a single exception this is the sweetest watermelon of all.

**Bradford.** Shape long, color dark, with darker wavy bands, flesh melting and excellent.

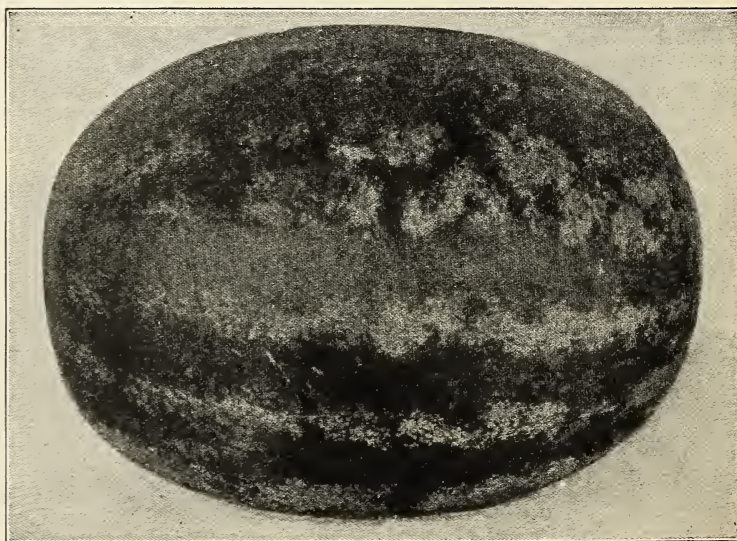
**Triumph.** It is a cross between Duke Jones and Kolb's Gem. It has the handsome appearance and dark green color of the former and the shipping qualities of the Gem; medium season, very prolific, deliciously sweet and of enormous size.

**Golden Honey.** The best of the yellow fleshed melons. It is oblong in shape, the seeds are white with black tips and the average weight is 20 pounds. The rind is dark green with irregular stripes of darker green.

**Green Seeded Citron.**  
**Colorado Preserving.**

**Red Seed Citron.** For preserving.

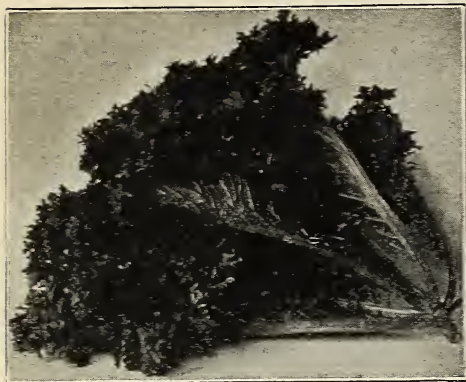
**Kolb's Gem.** A large oval melon, slightly flattened on the ends. It is striped alternately with dark and light green, black seed and it is adapted for shipping. It is medium late in maturity with an average weight of 20 pounds. One of the standard varieties of Watermelon.



**KOLB'S GEM WATERMELON**



## MUSTARD



GIANT SOUTHERN CURLED

**Culture.** Mustard is grown for its seed which is used for flavoring or medicinal purposes or grown for its leaf which is used in salad or cooked like spinach. Sow mustard as soon as the soil can be worked in spring and every three weeks for a succession, or in the south it may be sown in the fall for early spring greens. Cover the seed lightly in twelve to eighteen-inch drills. Cut the leaf when not over four inches high and expect this cutting in fifty days from the seeding.

**Southern Giant Curled.** The favorite in the South. Fordhook Fancy, or Ostrich Plume. Same as above.

**Chinese or Large Leaved Mustard.** The large leaves which often measure fourteen inches are ready for use in about six weeks after sowing. Plants will continue to yield until frosty weather. Leaves are eaten boiled, like spinach.

**White.** Best for general use.

**Brown.** Stronger than above.

## MUSHROOM SPAWN

There is a mistaken idea that mushroom growing is difficult. They will do well almost anywhere that a fairly uniform temperature of forty-eight to fifty-five degrees can be maintained. For the purpose one may use sheds, caves, cellars or space under the greenhouse benches. A more uncertain method, but one which gives us surprise crops, is to insert from time to time pieces of spawn in the lawn or in old pastures. Full culture directions for mushroom growing free.

One pound of spawn is sufficient for a bed two by six feet.

**American, Pure Culture, Spawn.** Produced by the new grafting process, from selected and most prolific varieties, has never failed to run.



## NASTURTIUM

**Tall Mixed Garden.** Grown not only for ornament, but the beautiful orange colored flowers and foliage are used for garnishing and the young leaves or shoots are excellent for salads. The green seed pods are greatly esteemed by many for use in mixed pickles.

**Dwarf Mixed Garden.** Same as above except that it grows in dwarf form.

For named varieties see pages 56 and 57.

## OKRA, OR GUMBO

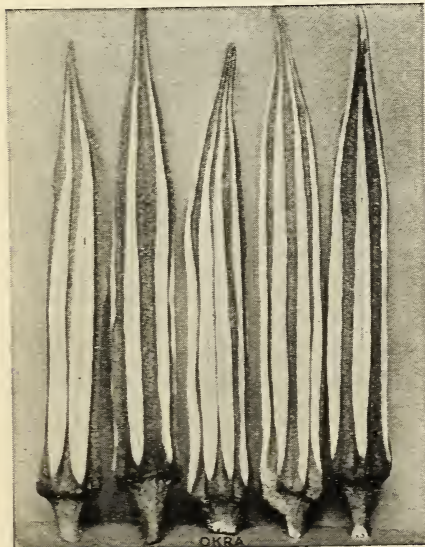
**Culture.** The pods of this plant are used in a great number of ways throughout the Southern States, and the plant should be more frequently grown in the north. Plant at corn planting time in rich land, sowing the seed thickly in two to three-foot drills, and thinning to an eight to twelve-inch stand, according to varieties. A generous planting is two ounces to one hundred feet and ten pounds to the acre. Okra seed may be planted six seeds to the hill, two to three feet apart and thinned to two plants to the hill.

**Perkins Mammoth Long Pod.** The pods are produced in great abundance and average longer than other sorts.

**Dwarf Green.** Grows low but stocky and is very productive.

**Long Green.** Taller than above, pods similar.

**White Velvet.** Produces pods larger than any other.





## ONION SEED

**Culture.** Study the demands of your market to know what onion that market requires.

As soon as the soil can be work in spring, and not after May 1st, sow onion seed in twelve to fifteen inch rows, leaving out every tenth row as a weed alley if preferred. One ounce of seed plants one hundred fifty feet and four to five pounds plants the acre. The black, slow-germinating seed should be covered firmly one-fourth inch deep. Quantities of manure had best be applied in the year before the planting, and much commercial fertilizer, high in potash, harrowed in immediately before seeding.

Begin cultivation as soon as the plant can be seen; cultivate frequently and when convenient thin to a stand of two to four inches.

**Early Flat Yellow Danvers.** A good variety, but not as round or quite as early as the Yellow Globe Danvers.

**Yellow Strasburg, or Dutch.** One of the oldest varieties. Bulbs quite flat of good size, skin yellow, flesh white, of mild flavor and keeps well. This is the variety used very extensively for growing yellow onion sets.

**Australian Brown.** Is of medium size, wonderfully hard and solid and most attractive for market, both as to form and appearance. The color of the skin is a clear amber brown.

**Japanese or Ebenezer.** A yellow variety of great merit. A heavy yielder and good keeping Onion. Does not run to seed readily.

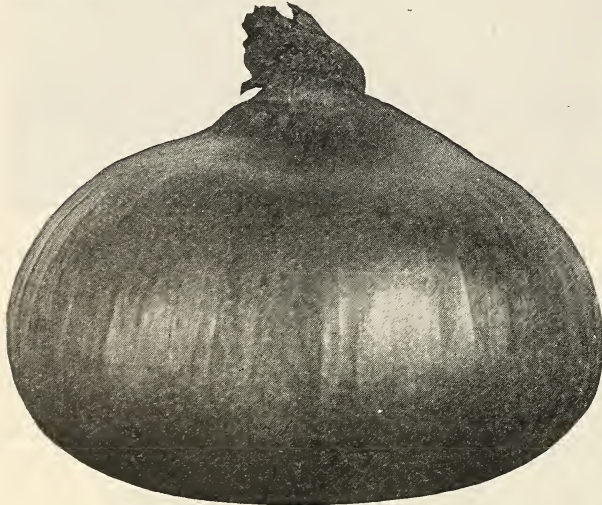
**Yellow Globe Danvers.** This fine onion is of large size. An early and abundant cropper. Bulbs very thick, flat or slightly convex bottoms, full oval top with small neck and rich brownish yellow skin.

**Michigan Yellow Globe.** The bulbs are large and uniformly spherical with very small necks and the largest diameter below the center of the bulbs of a rich orange color.

**Ohio Yellow Globe.** An early Globe onion, small neck and very uniform in size and color. Very popular in the marsh onion sections of Ohio and Indiana.

**Southport Yellow Globe.** A large, perfectly shaped Globe onion and an excellent onion for keeping throughout the winter. A very heavy cropper, handsome in appearance and a good dark yellow color.

**Prizetaker.** Grows to an immense size and for fall marketing is unexcelled. Although of such great size, it is very hardy and a fair winter keeper, as it ripens up hard and firm; very fine grained, and of mild delicate flavor. The outside skin is rich yellow while the flesh is white. To get the best results from this onion the seed is sown in beds and transplanted. It will, however, make a good crop if sown in the ordinary way.



LARGE RED WETHERSFIELD

**Denia.** A very large, globe shaped pale yellow onion.

**Extra Early Flat Red.** This variety matures from ten days to two weeks earlier than the Red Wethersfield. The color is a deep rich red, fine grain and close.

**Large Red Wethersfield.** We have a very fine and select strain of this sort. Color is deep purplish red, flesh white moderately grained and very firm. Yields an enormous amount per acre, and is one of the best winter keeping onions.

**Southport Red Globe.** This is a fine keeper. Large size and considered one of the best red onions. Flesh is fine grained, very mild and tender.

**White Portugal.** American Silver Skin. This is the best sort to sow—for onion sets or for pickling. When sown thickly for either it makes a small, round, hard bulb.

**Philadelphia Silver Skin.** Very desirable for family use. Flavor mild and pleasant.

**Extra Early Pearl.** A very fine, Italian variety that grows quickly to a good marketable size. Very popular, particularly in the South. The bulbs are round, flattened, with a delicate pure white skin.

**Southport White Globe.** This grows to a very large size and is a perfectly globe shaped onion. Color is clear pure white. This variety is used by the Chicago market gardeners for bunching.

**Yellow Bermuda.** A pale or straw colored onion.

**Crystal White Wax.** This variety is popular in the South where the transplanting method of culture is practiced. A large, beautiful, silvery white skinned variety, of handsome flat shape, of very fine flavor and quality.

**White Queen** is a fine early silver skinned variety, of beautiful form and rapid growth, and possessing fine keeping qualities.

**White Welch.** A very hardy perennial variety of onion, used only for bunching or early green onions. Seed may be sown in late summer or early fall for early spring onions.

**Mammoth Silver King.** This is a grand onion. It is a mammoth grower, of beautiful pearly white color, almost transparent in appearance. To match Spanish King at fairs and exhibitions it is just what is needed.



## LEONARD'S GLOBE ONIONS



LEONARD'S THREE GLOBES

Leonard's Three Globes bring more money to the onion grower and sell quicker than any other varieties. Our Yellow Globe is the Standard Yellow, our Red Globe is the Standard Red, and our White Globe is the Standard White.

### LEONARD'S YELLOW GLOBE

This onion is our prize yellow market variety. It is the most uniform as to size, the most productive, the best keeping and the handsomest yellow-skinned Globe variety we have ever known. It has taken years of patient effort to bring it to its present perfection, and to keep up the standard of excellence requires extreme care in the selection of bulbs to set out for seeding when the time for that event occurs each year. This onion has the call on the Chicago market, and our home sales for seed of it are very large.

### LEONARD'S RED GLOBE

The deep dark red color of our Red Globe is one of its superior points, while in shape and size it is a counter part of our Popular Yellow Globe.

In the Michigan, Indiana and Ohio onion sections as well as in Illinois and Iowa this strain of Red Globe produces the prize-winning red onions.

Where competition is keen it will pay large returns for the additional cost of the seed.

### LEONARD'S WHITE GLOBE

White skinned onions when successfully grown are by all means the handsomest and will usually bring more money per bushel than either of the other colors. It is harder to grow them to perfection than red or yellow, but many large growers score big returns from a crop of whites. This strain of White Globe is uniform in size and shape with our Yellow and Red Globe.

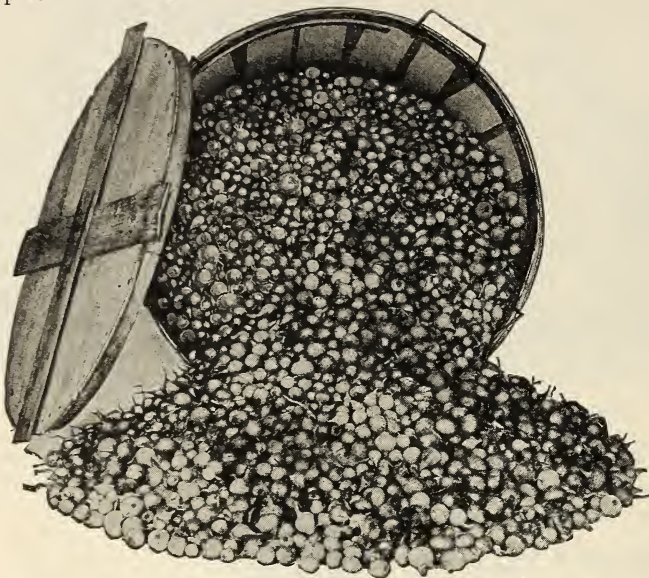
We are growers of Onions, as well as sellers of the seed. We would not sell any seed that we would not feel satisfied to plant ourselves. We know what Onions should be and we know the value of good seed.

The large Onion growers in Illinois, Indiana, Ohio, New York, Connecticut, Massachusetts and other states, whose main crop is Onions and who know the value of good seed, use Leonard's Onion Seed.

## LEONARD'S ONION SETS

Leonard's Onion Sets are the Chicago Standard. We are the pioneers in set growing here. The Chicago onion set has that fine, bright color which is so much desired, and being grown from the same kind of seed that produces our best large onion it produces a bulb far superior to the Southern or Southeastern product. We claim a superiority for our onion sets which comes from superior knowledge in planting, harvesting, storing and shipping as a result of long continued experience and large operations. We are now and for many years have been the leading Onion Set growers.

**For Early Use.** Onion Sets are used in place of seed to make early large onions, or to plant instead of seed for green onions. The sets will produce green onions ready to eat three weeks before the seed and if not pulled, but allowed to mature, make a choice large onion for keeping purposes and later use.



**Plant Small Sets.** The large, coarse Onion Sets, over an inch in diameter, are apt to go to seed instead of producing a nice green onion and bulb, so you should always buy Leonard's small, wire screened Onion Sets, screened through an inch mesh, the proper size for planting to give the best results.

**Plant More Onion Sets.** Everyone should plant some Onion Sets in their garden. They can be planted as soon as you can dig in the ground in the spring and replanted every week or ten days, so that green onions, fit for table use, may be had until late in the season. Then, any which are not pulled for early eating, can be allowed to mature and stored away for fall and winter.

**Eat More Onions at All Times.** Medical authorities agree there is no vegetable more healthy than onions and advise the free use of onions both green and cooked. It is even claimed they are a

preventive of Influenza and Grippe. Buy Onion Sets freely, plant double the usual quantity and replant several times in the early spring and summer so you will have plenty of onions to eat all months in the year.

**Yellow.** Grown from seed of Strasburg or Yellow Danvers, either of which we can furnish. Yellow is the standard color for onions in many of the largest markets.

**Red.** Grown from the Red Weathersfield variety and will produce marketable onions several weeks earlier than seed. For green onions they are also very desirable.

**White.** Grown from White Portugal seed. White sets produce the finest early green onions and no garden should be without them.

**Brown.** Grown from Australian Brown Seed. Excellent keepers as Sets. Are very hard and solid.

**Japanese or Ebenezer.** A yellow variety of great merit. A heavy yielder and good keeping Onion. Does not run to seed readily.

**White Pearl.** This is the early waxy silvery white onion which is used for fall planting only. It produces an onion that in mildness of flavor is probably not surpassed.

**Bermuda.** These sets produce the pale red, slightly flattened onion, with white flesh, at times slightly suffused with pink. For fall planting only.

**Crystal White Wax.** Produces large pure white flattened onion of mild flavor. For fall planting only.

**Yellow Shallots or Multipliers.** The clumps are divided and they multiply very abundantly. Are grown largely for flavoring.

**White Multipliers.** The same as Yellow Multipliers, except in color.

**Yellow Potato.** The old original English Multiplier.

**Winter Top, Egyptian or Perennial.** These are very hardy; they need no protection during the winter and will continue for many years to yield an abundant supply of green onions without replanting.

Our position as MARKET GARDENERS' SEEDSMEN is well and favorably known both at home and throughout the country. Our pre-eminent standing in this line of the Seed Business has been long established. The Market Gardener, when he plants LEONARD'S SEEDS, may therefore feel reasonably sure that he is planting the best seed obtainable.



## PARSLEY

Parsley used for garnishing and for seasoning can be planted as soon as the soil can be worked in spring. Cover the slow germinating seed one-fourth inch deep in twelve to eighteen-inch rows, later thinning to a six-inch stand. One-fourth ounce sows one hundred feet and three to five pounds plant an acre. To improve the appearance of the crop, trim the plants with a sickle two or three times during its growing season and at the approach of winter transplant to cold frames or a sunny window. Parsley may be mulched with coarse litter and wintered for spring use till the new crop begins.

**Double Curled.** The standard sort for outdoor culture, also highly prized by market gardeners for the greenhouse.

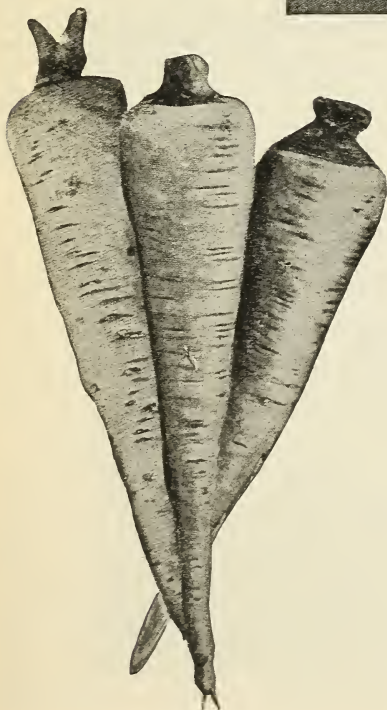
**Champion Moss Curled.** A very fine curled variety. One of the handsomest for garnishing purposes. The exceedingly curved leaves make it desirable.

**Triple Curled or Myatt's Garnishing.** Very finely curled variety of dark green color. One of the best varieties for all purposes.

**Plain.** Leaves flat, deeply cut but not curled; often preferred on account of the very dark green color as well as the hardness of the plant and its superiority for flavoring. The curled sorts are more extensively used for garnishing.



CHAMPION MOSS CURLED PARSLEY



PARSNIP

**Hamburg or Rooted.** The turnip-rooted parsley serves a double purpose; it can be used much in the same way as other parsley, but is mostly grown for the thick, fleshy roots. The roots are nearly white in color, growing about six inches long and about two inches thick around the neck. They gradually taper toward the base. The flesh is white and somewhat dry. In flavor it resembles celeriac. It is quite well known in some parts of Europe, and is used for flavoring soups, stews, etc.

## PARSNIP

**Culture.** Plant parsnip seed as early as the soil can be worked in spring and do not cover this slow germinating seed deeper than one-fourth inch. Use eighteen to twenty-four-inch rows, thinning the plants to a four-inch stand. One-half ounce of seed sows one hundred feet and three to five pounds plant an acre. This crop requires the entire season to mature, and as frost improves the roots, they may be left in the ground all winter. Both as to quantities and its feeding values, the parsnip is a valuable stock feed.

**Hollow Crown.** Roots long, white, smooth, tender, sugary and of most excellent flavor. Very hardy, and will keep through winter without protection.

**Guernsey.** Root white, very tender, with a smooth, clean skin. The variety is easily distinguished by the leaves growing from depression on top or crown of the root.



## PEAS

**Culture.** All varieties of peas, regardless of height, may be grown successfully without a trellis or support. As peas vary in height from six inches to six feet, it follows that the distances in the row and apart in the row should vary. Dwarf or half dwarf varieties are best planted in double or companion rows six inches apart to support and shade each other in their growth; then leave a space of eighteen to thirty inches, according to height of the variety, and repeat the double row. The tall varieties that may be given support are planted in single rows, the space between the rows somewhat less than the height of the variety. Drop ten to twenty dwarf peas to the double row or six to ten tall peas to the foot of row, using one quart to one hundred feet and three bushels to the acre. Plant all peas about five inches deep in soil that has been deeply plowed. This deep planting is the grower's attempt to give the peas the cool, damp climate they prefer. Lightly harrow or rake the soil when the peas should be breaking through, and continue to cultivate until the vine stops the work. All peas stand some frost and may be planted as soon as the soil may be worked in spring. Peas should be planted frequently for a succession all north of the Ohio. The early varieties are planted in August for a late autumn crop. For quality's sake pick peas before they crowd the pod and pick all pods as rapidly as produced to somewhat extend the plant's bearing. As all varieties of peas lose their characteristics when left without that selection given by expert seedsmen, it is necessary to go to a reliable source for seed peas.

**Notice.** Wherever the number of days from planting to first picking for table use is given, the time is taken from our trial ground records made during the season of 1909 in Wisconsin. Weather conditions, variations in soil and cultivation, as well as difference in latitude, will make either a longer or shorter period of growth.

As to the superiority between smooth and wrinkled peas, it is all a matter of individual taste, but the preponderance of taste is in favor of the wrinkled varieties.

### SMOOTH SEED

**Alaska.** Well known and extensively used, especially by canners. Very early and when carefully grown, uniform in ripening. Vine is strong and vigorous, two to two and one-half feet high, of a peculiar light green color; pods two and one-fourth to two and three-fourths inches long, straight and blunt at the end, and light in color. Is ready for picking forty-nine to fifty days from planting. Seed round, blue, slightly pitted.

**First and Best.** Early, productive and hardy, with a strong, vigorous vine, which is light in color and uniform growth, two and one-half to three feet in height and bearing straight pods two and one-half to two and three-fourths inches long, round, light in color and blunt at the ends. Is fit for table use fifty to fifty-two days from planting. Seed round, rather small, and white in color.



ALASKA

**Extra Early.** Early, productive and hardy, with a strong, vigorous vine, which is light in color and uniform in growth, two and one-half to three feet in height and bearing straight pods two and one-half to two and three-fourths inches long, round, light in color and blunt at the ends. Is fit for table use fifty to fifty-two days from planting. Seed round, rather small, and white in color.

**Early May Improved.** This pea is one of the best of the "White" earlies and is superior to First and Best or Prolific Early Market. Vines are strong growing for this class of pea, about thirty inches in height, foliage pale green. Pods are pale colored, straight, round and blunt. Average two and one-fourth inches in length. Fit for use fifty-six days from planting. Seed small to medium sized, white and smooth.

**Prolific Early Market.** Said to be an improvement over the First and Best. This pea is early, hardy and productive. Vines are strong and vigorous, pale green color. Height two and one-half to three and one-third feet. Pods are round, blunt, light green colored and average two and one-half to two and three-fourths inches in length. Is fit for table use in fifty-two days from planting. Seed medium sized, yellow and smooth.



## PEAS—Smooth Seed—Continued

**Ameer.** Resembling the Alaska in appearance, three to three and one-half feet in height. Pale green foliage. Pods two inches in length, pointed, dark green in color. Seed blue, dented, medium pitted.

**Bountiful.** Resembling the Alaska in general habit of growth. Vine thirty-six inches, foliage gray green; pods three and one-half inches in length, pointed, gray green in color. Fit for table use fifty-five to fifty-seven days from planting. Seed blue, medium pitted.

**Claudit.** In general habit and height of vine resembling Alaska, ripening almost at the same time, but with much longer, broader pods. Pods well filled at the point. Seed round, light green, dented, height  $2\frac{1}{2}$  feet.

**Long Island Mammoth.** Very popular with market gardeners who want a large, handsome pod of a dark green color.

**Pilot.** Very similar to Gradus as to earliness, color of vine and pod as well as quality. Vines grow to a height of 3 to 4 feet with foliage medium to dark green color. Pods are large, pointed at end and broad. Dark green in color. Is fit for table use 60 days from planting. Seed yellow and green mixed, medium sized and nearly smooth.

**Pride of the Market.** Of fine growth and general appearance, both vine and pod, and closely resembles the Stratagem except that the vine is not quite so long and the pods are deeper green in color. The vine is twenty inches high, foliage dark green color. Pods are three and one-half inches long, broad and dark in color. Fit for table use sixty-one days from planting. Seed blue. Slightly dented, large.

**Mammoth Melting Sugar.** Large edible pods. Height forty-two to forty-eight inches. Pods, four to four and one-half inches long and one and one-eighth inches broad. Fit for table use eighty days from planting.

**Improved Sugar Marrow.** Much better than the old White Marrowfat. Pods larger, well filled and of the true marrow flavor.

**White Marrowfat.** Vines hardy, strong, vigorous and bearing broad, thick leathery pods near the top of the vine, and containing peas of a fair quality. Height forty-five to fifty inches, foliage light green in color, pods three inches long, blunt and light green. Ready to pick sixty-nine days from planting. Seed large, smooth, white.

**Black Eyed Marrowfat.** Strong and vigorous vines bearing pods near the top of the vine. Peas of a fair quality. Height fifty to sixty inches, light color foliage, pods three inches long, blunt, light green. Ready to pick sixty-nine days from planting. Seed large, smooth, white with a black eye.



PEA TRIALS AT OUR COLUMBUS, WIS., PLANT



## PEAS—Continued—Wrinkled Seed



LAXTONIAN

**Little Marvel.** An extra fine dwarf sweet pea. Pods somewhat larger than Nott's Excelsior and same season. A fine variety for either private or market garden. Height fourteen inches. Foliage and pods very dark green; pods three inches long, nearly round and square ended, containing seven very dark green peas of high quality; very productive.

**Dwarf Telephone.** Vines eighteen to twenty inches high, with rather coarse foliage, medium light green, bearing pods, broad, straight and about four inches long. Pale green in color and well filled with peas of excellent flavor. Ready for picking from sixty-two to sixty-five days from planting. Seed pale green, large, much wrinkled.

**Sutton's Excelsior.** Similar in habit of growth to Nott's Excelsior, but bearing very large, broad pods, well filled with large peas. Very tender, and of the most delicious flavor. Vines about eighteen to twenty inches high, medium light in color with pods three and a quarter to three and a half inches long, light in color and blunt at the ends. Is ready to pick fifty-two days from planting. Seed green, wrinkled, medium in size.

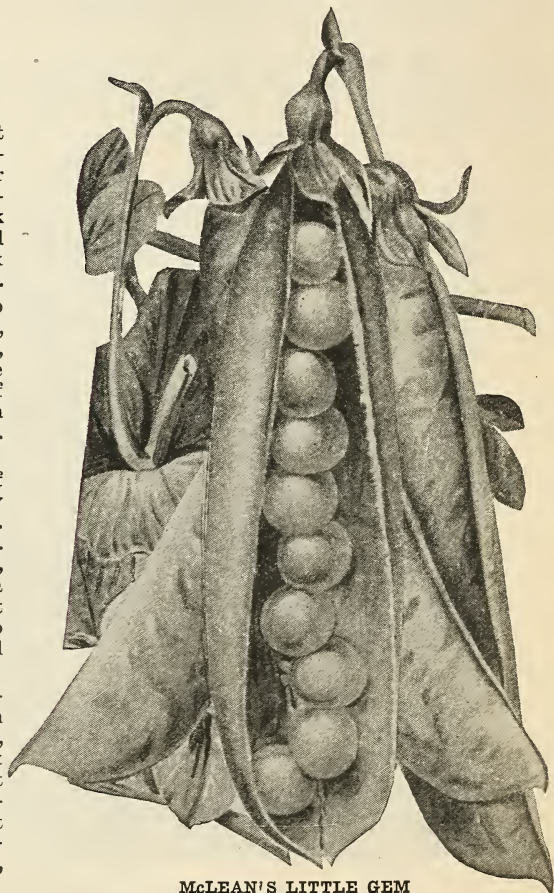
**Gems, McLean's Little.** Strong and vigorous in growth, producing vines from eighteen to twenty-four inches in height, dark foliage, bearing pods singly on both sides of the stalk beginning near the ground. Pods are almost straight, two and a half to two and three-quarter inches long, light in color and blunt at the ends. Ready to pick fifty-nine to sixty-one days from planting. Seed is green, wrinkled, and medium in size.

**American Wonder.** Vigorous, producing vines, with a luxuriant foliage, and producing the leaves on one side of the stalk, growing from nine to twelve inches high. On account of its dwarf habit of growth it is very desirable for private garden use. Pods are light colored, straight, round, about two and one-half inches long and blunt at the end. Fit for picking fifty-five days from planting. Seed is wrinkled, green, medium in size and square at the ends.

**Nott's Excelsior.** Resembling Gems in habit, but more dwarf and uniform in growth, height twelve to seventeen inches, with rather light foliage. Pods are light in color, round, about two and one-half inches long, blunt at the ends. Fit for picking fifty-six days from planting. Seed green, wrinkled, medium in size and square at the ends.

**Blue Bantam.** A splendid large-podded dwarf variety of the Laxtonian class. Height fifteen inches. Vines and foliage stout and healthy, medium dark green; pointed pods deep green, four inches long, broad and straight, containing six to eight deep green peas of excellent quality.

**Laxtonian.** This handsome wrinkled pea is the largest podded of the dwarf varieties. The dark green pods are similar to Gradus in shape and splendid quality, are nearly as large in size and often mature a little earlier. Vines vigorous and productive, averaging fifteen to eighteen inches high; foliage dark green; pods about four inches in length. Seed light green, large wrinkled, flattened, irregular in shape. The earliness in combination with the very large, handsome, dark green pods, makes this the ideal pea for the market grower or planter for profit.



MCLEAN'S LITTLE GEM



## PEAS—Wrinkled Seed—Continued

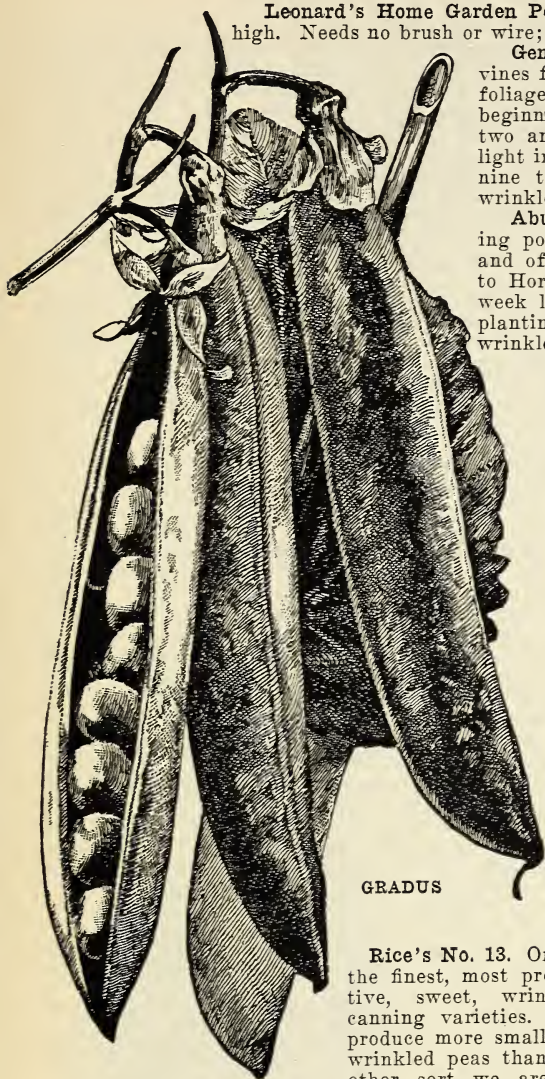
**Leonard's Home Garden Pea.** Here is the Pea for every garden; 20 inches high. Needs no brush or wire; wonderful cropper, delicious quality, big full pods.

**Gems, Premium.** Strong and vigorous, producing vines from eighteen to twenty-four inches in height, dark foliage, bearing pods singly on both sides of the stalk beginning near the ground. Pods are almost straight two and one-half to two and three-quarter inches long, light in color and blunt at the ends. Ready to pick fifty-nine to sixty-one days from planting. Seed is green, wrinkled and medium in size.

**Abundance.** Vigorous in growth and productive, bearing pods in great abundance, although of medium size, and of excellent quality. Very similar in every respect to Horsford's Market Garden, except that it is about a week later, being fit for picking seventy-one days from planting. Pods are dark green, and blunt. Seed green, wrinkled, medium in size.

**Horsford's Market Garden.** Strongly resembling Premium Gem in habit of growth, but about one-third taller. Vines growing twenty-six to thirty inches high, foliage dark green, pods light colored, straight, about two and one-half inches long and blunt. Fit for picking sixty-eight days from planting. Seed green, wrinkled, medium in size. A very popular pea with the canners and market gardeners on account of its excellent quality.

**Advancer.** Vines upright and vigorous in growth, hardy and productive. Height thirty inches, foliage dark green, pods two and one-half to two and five-eighths inches long, round, dark colored and blunt, fit for picking sixty-one days from planting. Seed green, wrinkled, medium in size. A very fine pea for canners' use.



GRADUS

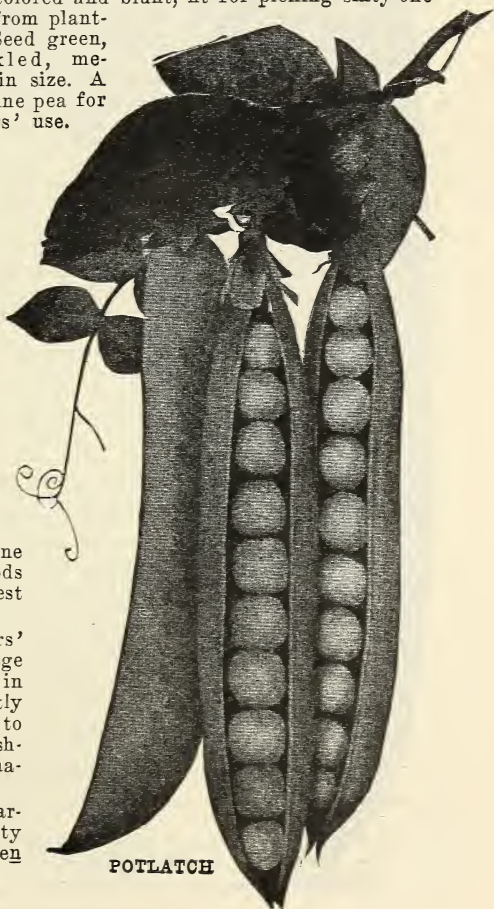
**Rice's No. 13.** One of the finest, most productive, sweet, wrinkled, canning varieties. Will produce more small size wrinkled peas than any other sort we are ac-

quainted with. Height  $2\frac{1}{2}$  feet. Vine and foliage deep green; pods medium light green,  $3\frac{1}{2}$  inches long, curved and pointed, containing 9 to 10 light green peas. Ripens very uniformly. Season trifle later than Horsford's Market Garden.

**Perfection.** Vine two and three-quarter feet. Vine and foliage moderately stout, deep green in color; pods medium green, three inches long and borne in greatest profusion.

**Admiral.** An enormous cropper and a leading canners' variety. Height three and one-half feet. Vine and foliage slender as compared with Telephone and medium green in color; pods light green, three inches long, round, slightly curved and blunt ended and closely packed with eight to nine small peas of light-green color, changing to yellowish-white when ripe; quality good. Very productive and maturing with Telephone.

**Green Admiral.** Similar to Admiral in general characteristics, but is a decided improvement over that variety in that the peas retain their clear green color even when matured for seed. A canner's favorite.



POTLATCH



## PEAS—Wrinkled Seed—Continued

**Leonard's Potlatch.** Strong, vigorous vines of even growth, twenty to twenty-four inches in height, with luxuriant dark foliage, bearing pods medium green in color, three and one-half to four inches in length. Broad and pointed at the ends. No variety known will produce more pods, and no pods could possibly shell out better. The Potlatch is a variety from which anyone may expect great things. Fit for table use sixty-one days from planting. Seed green, wrinkled, large in size. We consider ourselves very fortunate in having secured and introduced this pea.

**Dwarf Defiance, Suttons.** The vines, vigorous and hardy, about two feet in height, with coarse dark green foliage, bearing long, broad pointed pods, dark green in color. Fit for picking sixty-one days from planting. Seed large, green, wrinkled. This pea is much more uniform in growth than the Stratagem, which it very closely resembles, and has the advantage of remaining fixed in its type, and showing practically no sports or runners.

**Stratagem.** A vigorous, hardy and luxuriant vine, bearing large pods containing peas of excellent quality. A heavy cropper, although it has a tendency to sport. Vines twenty inches. Foliage dark green. Pods three and one-half inches long, straight, broad, pointed, gray green in color. Fit for table use fifty-six days from planting. Seed very large, green, wrinkled.

**Gradus.** A large wrinkled, early pea with a pod nearly as large as Telephone, filled with large peas, tender and of good quality and flavor. Very quick to germinate and mature with the early sorts. This pea will not stand adverse conditions, however, as well as some of the other sorts, and seed must be planted after all danger of early frost has passed. Height of vine twenty-six to thirty inches, with large luxuriant foliage, pale green in color. Pods dark green, four to four and one-half inches in length and pointed. Fit for table use fifty-two days from planting. Seed large, cream colored, wrinkled.

**Thomas Laxton.** Closely resembling Gradus in habit, rapidity of growth, earliness and foliage, twenty-six to thirty inches high, and much hardier in every respect than Gradus. Pods four to four and one-half inches long, round, well filled with peas, blunt at the end. Fit to pick fifty-two days from planting. Seed large, cream colored, wrinkled.

**Early Morn.** An English variety of the Gradus type with many desirable qualities. Bearing large, handsome pods in profusion. The peas are large, closely packed in the pod, and the flavor is sweet and delicious. The seed should not be sown until the soil is in a fit state to receive it early in April, as it is a rapid grower. The pods are very large and well filled and are often ready to pick during June. Height about three feet.

**Dwarf Gray Sugar.** The old variety of the edible podded sort, and is used in no other way. Grows about two feet high and is remarkable for its earliness. Pods are broad, flat and crooked and contain five to six peas. Seed is brown and wrinkled.

**Admiral Dewey.** One of the largest podded peas yet introduced. Height three and one-half feet; pods a rich, dark green color, frequently six inches long, beautifully shaped. Peas large, tender and of first-class flavor.

**Telephone.** Vines and leaves large and coarse. Foliage light green in color. Height forty to fifty inches, pods four and one-half inches long, broad, pointed, medium green in color. Fit to pick sixty-two to sixty-five days from planting. Seed large, green, wrinkled.

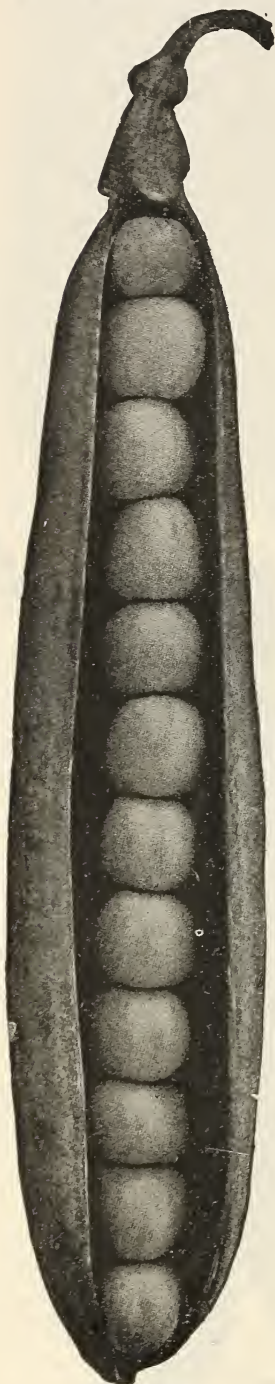
**Alderman.** A large podded pea of the Telephone type, very robust and vigorous as to vine. Foliage mixed, medium green. Height fifty inches, pods five inches long, broad, pointed, medium green in color. Seed green, wrinkled, large.

**Duke of Albany.** Resembling the Telephone in appearance. Vine and foliage medium green in color. Height fifty inches, pods five inches long, broad, pointed, dark green. Seed large, green, wrinkled.

**Everbearing.** Vigorous and branching in habit of growth. Height two and one-half to three feet. Pods two and three-fourths to three inches long. Broad, light colored and blunt. Fit to pick seventy days from planting. Seed green, wrinkled, large in size.

**Champion of England.** Strong and vigorous in growth, forty-two to fifty inches in height. Foliage medium green. Pods two and one-half to three inches long, blunt, medium dark green in color. Ready to pick sixty-eight to seventy-three days from planting. Seed large, green, very much wrinkled.

**Yorkshire Hero.** Hardy, productive and upright in growth, bearing near the top of the stalk, broad, pointed pods with peas of good quality. Foliage dark green, twenty-three to twenty-eight inches in height. Pods two and one-half to three inches long, blunt, light green in color. Fit to pick sixty-eight to seventy-three days from planting. Seed large, green, wrinkled.



TELEPHONE



## PEPPER

**Culture.** The pods of the pepper are used in sauces, salads, soups or as a seasoning, and the large mild varieties called mangoes are eaten from the hand or variously stuffed and prepared with cabbage, tomatoes or meat. The pods of peppers are green until in ripening they turn red or yellow, according to the variety. Start pepper in hotbeds and in other ways treat like a tomato. Set out of doors after frosts in thirty inch rows, giving each plant eighteen inches in a row. One ounce of seed gives, according to the handling, from 1,000 to 2,000 plants and one pound plants an acre.

**Large Bell or Bull Nose.** A very large sort of inverted bell shape, suitable for filling or for a mixed pickle. Flesh thick, hard and less pungent than most other sorts.

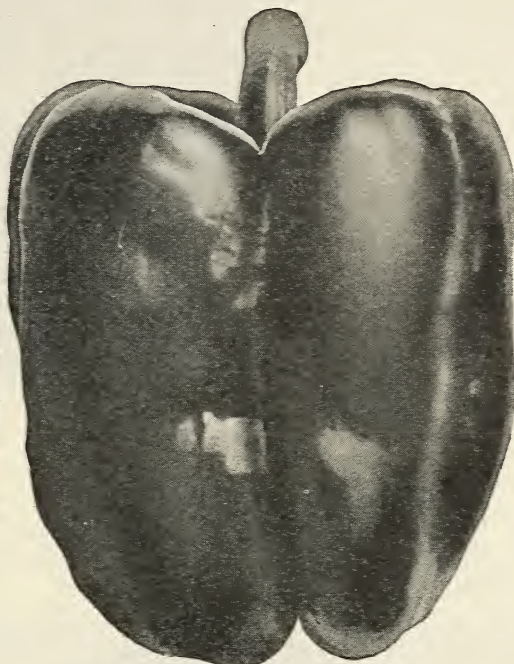
**Sweet Mountain.** Plants very vigorous and productive, growing upright, with moderately large leaves. Fruit very large, long, often eight inches or more in length, by two inches in diameter.

**Royal King.** A very smooth, sweet pepper, larger than Sweet Mountain, just right for stuffing and pickling.

**Ruby King.** An improved American variety, very large and attractive. The plants are about two and one-half feet high, vigorous, compact and productive. The fruits are often four to four and one-half inches long and of deep green color when young, bright red when ripe. The flesh is thick and mild flavored. One of the best varieties for mangoes or stuffed peppers.

**Ruby Giant.** An improvement over Ruby King. It is larger, smoother, finer grained and sweeter. An excellent pepper.

**Chinese Giant.** Without doubt one of the very best and largest Mango Peppers ever introduced. Its mammoth size, splendid shape, beautiful, rich, glossy-red flesh and mild flavor, all lead us to speak of it in words of commendation.



CHINESE GIANT



RUBY KING

**World Beater.** One of the very best of the large peppers, being a cross between Chinese Giant and Ruby King, having the longer form and earliness of the latter with the size of the former. Fruits four lobed, five inches long by three and one-half inches in diameter; flesh very thick and mild, exceedingly productive and a good shipper.

**Pimento.** A very thick-fleshed, smooth, mild, crimson variety, much used for salads; fruit pendent.

**Golden Queen Mammoth.** Very large fruits; rich golden yellow color; early.

**Golden Dawn.** In shape it resembles the popular Bell or Bull Nose Pepper. It is of a most beautiful golden yellow color, making a very handsome appearance, both in growth and upon the table.

**Long Rey Cayenne.** A long, slim, pointed pod, and when ripe, of a bright red color. Extremely strong and pungent.

**Red Chili.** Used in the manufacture of pepper sauce.

**Red Cluster.** A new type of Chili, with upright, bright red fruits.

**Red Cherry.** Plant tall, bearing a profusion of bright red, round fruit which is very pungent when ripe. The plant is very handsome and an ornament to the garden.

**Buy Seed in Bulk—The Better Way**

## PUMPKIN

**Culture.** The finer varieties of pumpkins are used for pies and the coarser ones for stock feeding. While the pumpkin may be grown very much as cucumbers are grown in a garden, they are more frequently planted in the field with corn, where several seed are dropped in each fourth hill. Planted alone, six to ten seeds are covered one inch deep in hills eight to ten feet apart and thinned to two to four plants to the hill. One ounce plants twenty-five hills and two to four pounds of seed generously plants an acre. As this plant requires as much time as corn to mature, the planting cannot be too long delayed.

**Large Cheese, or Kentucky Field.** One of the best for table use, and very productive. Shape flat; flesh yellow, thick and tender.

**Connecticut Field.** The hardiest of all pumpkins; cultivated mainly for stock-feeding, producing enormous crops.

**Large Tours, or Mammoth.** Grows to an immense size, often weighing over 100 pounds.

**Mammoth Portion, King of the Mammoth.** The flesh and skin are of a bright golden yellow color. Flesh fine grained and of excellent quality. This enormous variety has been grown to weigh 200 pounds.



LARGE CHEESE, OR KENTUCKY FIELD



CONNECTICUT FIELD

**Green Striped Cushaw.** Fruits very large, with crooked neck. Color creamy white, irregularly striped or traced with green. Flesh light yellow, very thick, rather coarse but sweet. This sort is very productive and popular in some sections.

**Cushaw, or Crookneck.** A favorite sort of excellent quality.

**Winter Queen.** This is an improvement of the old, well-liked sugar pumpkin. Its size is uniformly about nine to ten inches in diameter. In color, a beautiful deep orange yellow, with a very close netting, almost as russeted as a potato.

**Golden Oblong.** A productive variety, oblong in shape. Skin golden orange, flesh, yellow, dry and sweet; excellent.

**Sugar or Pie.** A rather small, but handsome variety. Shape, round; skin, deep orange colored; flesh fine grained, sweet-flavored; superior for pies.

**Japanese Pie.** Shaped somewhat like the Cushaws and grows to a large size; skin deep green with dark stripes; flesh deep yellow and of high quality; seeds sculptured like Chinese letters.

**Tennessee Sweet Potato.** Hardy, productive, sweet and delicious, and one of the best for cooking purposes ever introduced.

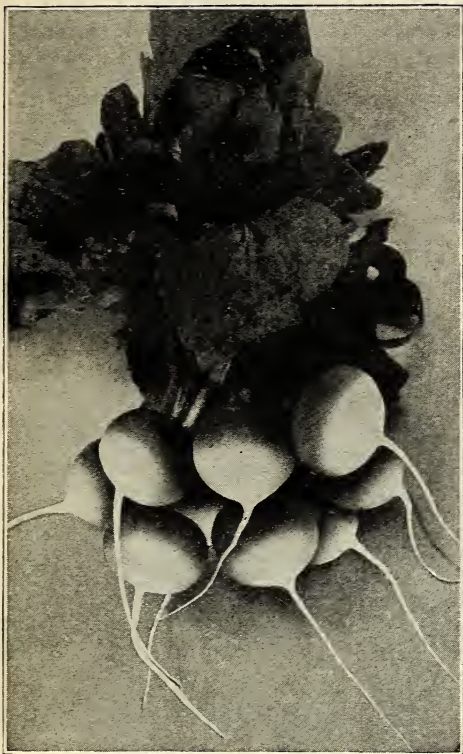
## RHUBARB—Pie Plant

**Culture.** Rhubarb succeeds best in deep, somewhat retentive soil. The richer its condition and the deeper it is stirred, the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year, and the plant never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of the Linnaeus, Victoria, Giant and other improved sorts, but like the seeds of the fruit trees, rhubarb seed cannot be relied upon to produce the same varieties.



## RADISH

A crisp, spicy, tender radish—what appeals quite so much to the appetite early in the spring, even while yet the winter has scarcely passed, than a fresh, snappy radish out of your own garden? Grow a few rows, plant them early and in less than thirty days try them with some rye bread and a bottle of near beer; you will agree then that they are the real spring tonic; in fact, they will taste so good you will plant some more at once for later use and then go out and make a real garden with all varieties of vegetables for summer and fall eating.



SCARLET TURNIP WHITE TIPPED

**Sparkler White Tipped.** A new and distinct globe-shaped radish. The roots, even when fully developed, are solid, crisp and sweet, remaining fit for use longer than most of the other globe-shaped sorts. The colors are more vivid and attractive. The upper part is a rich carmine scarlet, with a large tip of the purest white, which is quite distinct from any other variety. An excellent forcing sort for either greenhouse or frames or for growing in the open ground.

**French Breakfast.** Olive shaped, scarlet, with white tip; crisp and tender.

**Leonard's Three Leaf.** So named on account of its extreme earliness and the fact that when there are three leaves formed besides the seed leaf it is large enough to eat. It is an improved form of the well known Scarlet Olive.

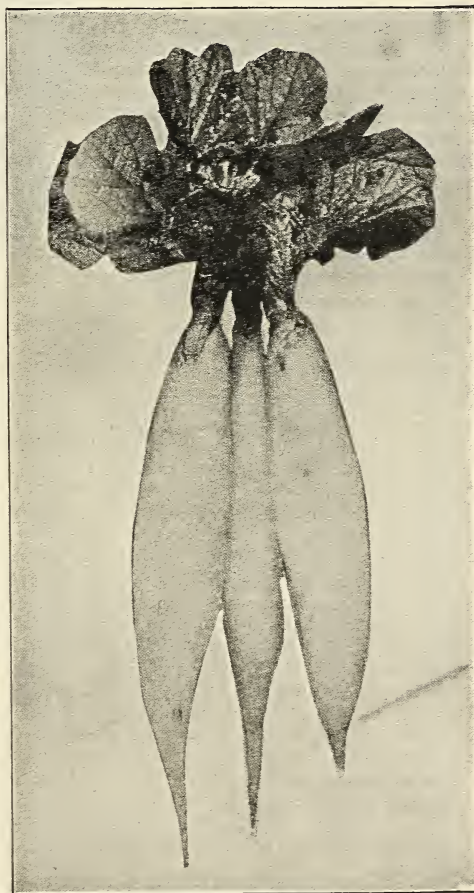
**Wood's Early Frame.** Shorter and thicker than the Long Scarlet Short Top, one of very best sorts for first crop out of doors.

**Scarlet Turnip White Tipped.** One of the handsomest of the turnip radishes and a great favorite in many large markets for early planting outdoors. It is but little later than the White Tipped Forcing, and will give entire satisfaction where extreme earliness is not the primary object. Roots slightly flattened on the under side, color very deep scarlet, with a white tip; flesh white and of the best quality.

**Culture.** Plant radishes on a light soil if a choice is possible, and every second week for a succession from the time the soil can be worked in spring till the first light frost. Plant in two to eighteen-inch rows, cover the seeds one-half inch deep and permit four to ten radishes to grow to the foot; use eight to twelve pounds of seed to the acre. Radish seed, which germinates quickly, may be sown with some slow-germinating seed that the cultivation of that crop may begin the earlier, or the quicker-growing radish may be grown between rows of some slow-growing crop that later requires considerable space.

**White Icicle.** This handsome white variety is becoming very popular. It is similar to White Vienna but is not so long, is earlier and has a shorter leaf. We recommend it as a profitable, early variety where a long white sort is desired.

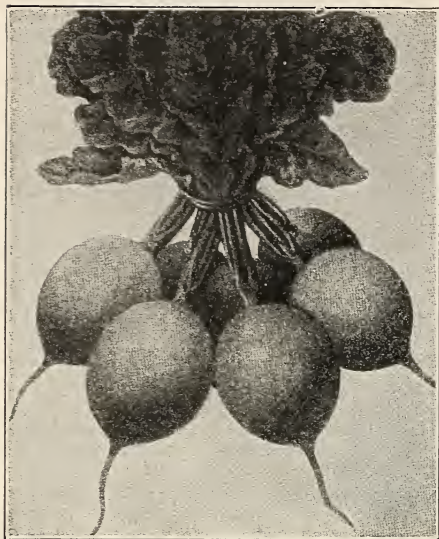
**Early Long Scarlet Short Top.** This bright scarlet, small topped sort is about six inches long, is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use.



WHITE ICICLE RADISH



## RADISH—Continued



SCARLET GLOBE RADISH

**Early Scarlet Globe.** A desirable sort for hotbed forcing and outdoors, very early; flavor mild; crisp, juicy and tender; top small; will stand heat without becoming pithy.

**Crimson Giant Turnip, Forcing.** A variety extraordinary in that while growing to an unusually large size, it is always tender, crisp and of mild flavor. It remains in perfect condition a remarkably long time, and unlike other forcing varieties, does not become pithy even when twice their size in diameter.

**Cincinnati Market.** The tops of this radish are very small and may stand much closer in the rows than Wood's Early Frame or Long Scarlet, without danger of running to seed.

**Early Scarlet Turnip.** The standard early turnip radish. Fine flavored and mild.

**Deep Scarlet Turnip.** This is a very bright colored Scarlet Turnip radish, very early and short leaf, well adapted to forcing under glass. Matures in fourteen to twenty-one days and its appearance will sell it in any market.

**Half Long Deep Scarlet.** A variety half the length of Long Scarlet and of same form.

**Scarlet Olive.** Very tender and a beautiful color. Early.

**Early White Turnip or White Box.** A little flatter than the Scarlet Turnip, and pure white in color.

**Long Brightest Scarlet, White Tipped.** This is the brightest and handsomest colored scarlet radish known, and a decided improvement in earliness and color over other varieties of this class. It makes roots fit for use in about twenty-five days from time of planting.

**Chartier.** Decidedly distinct in appearance. The color at the top being crimson, running into pink about the middle and from thence downward it is a pure waxy white.

**Long White Vienna, or Lady Finger.** A very excellent white variety with long, very smooth white roots, which are crisp and tender. It comes into use shortly after Wood's Frame and is one of the most desirable of the white summer sorts.

**Long White Pearl.** Similar to White Icicle.

**White Strasburg, or Summer Hospital.** Large, showy, half long, white sort. Grows with great rapidity, sometimes producing a crop in six weeks.

**White Summer Turnip.** A very large turnip shaped variety; white, very crisp and mild.

**Yellow Summer Turnip.** Like the above except in color.

**White Stuttgart.** A summer variety. Grows to an immense size. White flesh, very crisp and tender. Of good flavor, and a good keeper.

**Golden Globe.** This variety is of quick growth, affording crisp and tender radishes even in the hottest climate and is extensively grown in the South.

## RADISH—WINTER VARIETIES

The Winter Radish is sown at late turnip planting time and used in the autumn or stored for winter like the turnip.

**Rose or Scarlet China.** Roots cylindrical, or largest at the bottom, tapering abruptly to a small tap. Skin very smooth and of a bright rose color; flesh firm, crisp, tender and quite pungent.

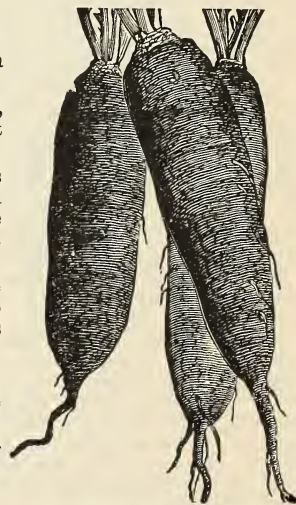
**White China or Celestial.** A comparatively new variety which is popular wherever known. The root is long, cylindrical, with beautiful white skin and flesh so white as to attract attention, even among the other white varieties. The flesh is very tender and of excellent quality.

**California Mammoth.** First introduced into this country by the Chinese in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter.

**Large White Spanish.** A large rooted winter variety.

**Round Black Spanish.** Roots round, sometimes top-shaped, three or four inches in diameter; skin black, flesh white, very compact and highly flavored. An excellent sort for winter, as the roots keep a long time.

**Long Black Spanish.** One of the latest as well as hardiest of the radishes; an excellent sort for winter use.



LONG BLACK SPANISH



## SALSIFY OR VEGETABLE OYSTER

The long, white tapering root of salsify resembles a small parsnip, and when cooked is a good substitute for oysters, having a very similar flavor.

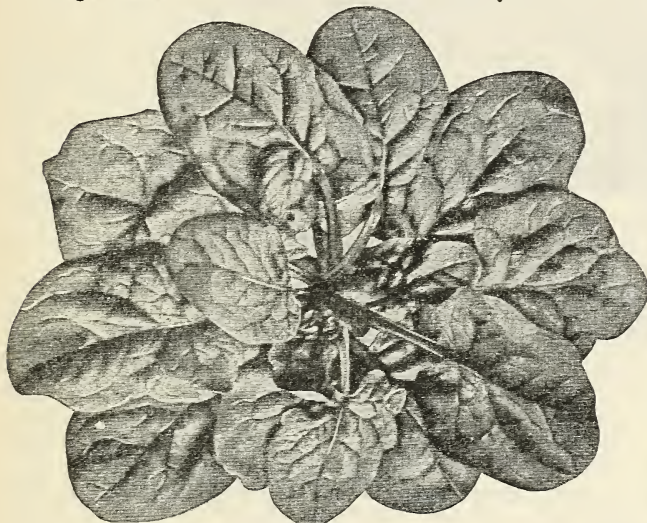
**Culture.** It succeeds best in a light well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy, and may remain out all winter. Store a quantity for winter use in a pit or cellar in damp earth or sand.

**Mammoth Sandwich Island.** This is in every way superior to the Large White, being larger, stronger growing and less liable to branch. Invaluable to market gardeners.

## SORREL

**Culture.** Sow in spring in drills eighteen inches apart, in a rich soil, and keep the flower stems cut off as they appear. It remains in the ground year after year, and needs to be taken up and divided only once in four or five years. To be cut and cooked precisely like spinach, or it is excellent cooked with it one-third sorrel to two-thirds spinach. It is also used for soups. Very nice to be eaten after it has become cool. Inasmuch as the hot sun tends to increase its acidity, a northern exposure is preferable.

**Large Leaver French.** The standard variety.



SAVOY LEAVED BLOOMSDALE

grows quickly to a suitable size for use, but soon runs to seed.

**Large Leaved Viroflay or Thick Leaf.** A variety which grows very rapidly, forming a cluster of large, very thick, slightly wrinkled leaves of fine color and quality. Recommended for market gardeners.

**Round Leaved.** This variety is generally preferred in the North for early spring sowing, and is the favorite with our market gardeners. The leaves are large, thick and fleshy. Though not quite as hardy as the Prickly Winter, it stands the winter very well.

**Fill Basket.** The largest early spinach, its broad, thick, dark green leaves are very tender and of delicious flavor. Withstands hot weather well.

**Triumph.** A very long standing variety. Plant makes a flat rosette; leaves compact, short, broad and pointed, much wrinkled and with a short petiole.

**Long Standing.** An improved, round seeded strain of excellent merit, having all the good qualities of other sorts and continuing in condition for use much longer. The leaves are smooth and very dark, rich green. Very popular with market gardeners.

**Broad Flanders.** An early and vigorous growing round seeded variety. The leaves are bright green, broad and thick with long petiole, usually broad arrow-shaped but sometimes rounded.

**Victoria.** An excellent sort, which forms a very large, exceedingly thick, dark green leaf somewhat curled in the center. It becomes fit for use nearly as early as any, remaining so much longer than most kinds, and cannot fail to please, whether grown for the market or in the private garden.

**King of Denmark.** The best long-season Spinach, remaining two weeks longer than others before bolting to seed. Plant vigorous and spreading; leaves large, rounded, crumpled and blistered, deep green in color.

**Prickly Winter.** A very hardy variety and will withstand the severest weather with only a slight protection of leaves or straw. The seed is prickly, leaves triangular, oblong, or arrow shaped. It is used for fall sowing, which in this latitude is about the first of September.

**New Zealand. (Tetragonia Expansia.)** This branching plant, a spinach in its use and not in its growth, frost kills, but grows luxuriantly in the summer heat. Plant these large seeds three in a hill, three by two feet apart or start the plants under glass and transplant.

**Swiss Chard.** See Page 9.

## SPINACH

**Culture.** As early as the soil can be worked, sow it one-half inch deep in fourteen-inch rows, using one ounce of seed to one hundred feet, and in the second week will appear a tiny plant with two very narrow leaves that do not resemble the true leaves that follow. Cutting should begin forty-five days from sowing. It is impossible to put spinach on too rich soil, and nitrate of soda is used on it with profit.

South of the Ohio, spinach winters without protection. North, it very often winter kills with good drainage and the best of straw covering.

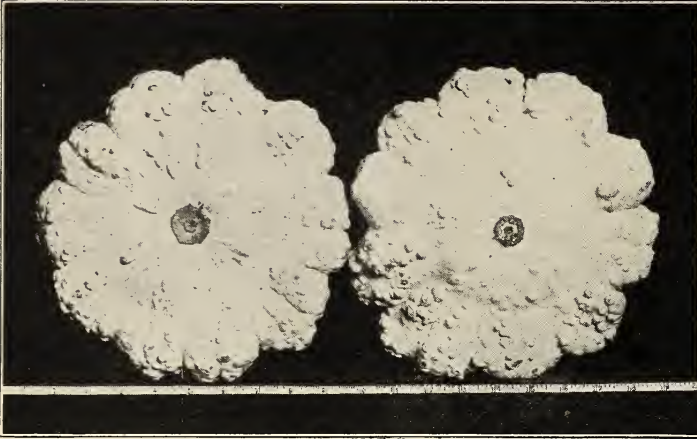
All spinach quickly runs to seed in the heat of summer.

**Savoy Leaved Bloomsdale.** The earliest and one of the best to plant in autumn for early spring use. Plant of upright growth, with narrow pointed leaves, which are curled like those of the Savoy cabbage. It



## SQUASH—Summer Varieties

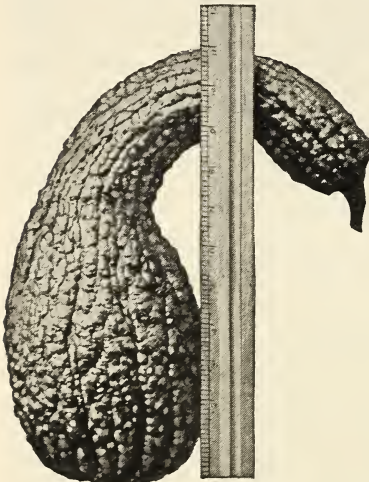
**Culture.** The directions for the planting of cucumbers can be followed with slight modifications for squash or cymling. Plant the summer squash in hills four feet apart and use before mature. Plant the winter squash in hills six or eight feet apart; handle without bruising and store in a dry, moderately warm place for winter. Plant the seed generously and thin to two or three plants to a hill. One ounce of seed plants twenty-five hills and two to four pounds plant an acre. The squash is to be recommended either for the table or the feed lot.



**MAMMOTH WHITE BUSH**

**Giant Crookneck.** This strain is a great improvement on the old variety of Crookneck. It is larger and better in every way.

**Summer Crookneck.** A standard early and productive summer variety. Fruits about a foot long, moderately warted and of a bright yellow color.



**SUMMER CROCKNECK**

**Italian Marrow.** (Cocozella di Napoli.) A distinct variety of squash of bush form. Fruit grows to a length of about twenty or more inches, with a diameter of three to four inches; skin smooth of a dark green color, marbled with yellow or with paler green. All through Italy, where this squash is grown, the fruit is eaten when quite young, sometimes even before the flower has opened. The plants which are thus deprived of their undeveloped fruit continue to flower for several months and produce a great number of young squashes.

**Leonard's Giant Straight-neck.** This strain of summer squash is quite an improvement over the Giant Crookneck. It is the most popular early variety with the Chicago gardeners. It is a very profitable sort to ship from Southern sections to the Northern market as it meets with a ready sale on account of its fine appearance. Our stock of this popular early squash has been selected with care and we find it superior to any other that we have tried. We recommend it to all market gardeners and to Southern truckers who ship early squashes North.

**Mammoth White Bush.** This variety is a selection made from the Early White Bush; the improvement consists in size of the squashes it produces.

**Early White Bush or Patty-Pan.** Is earlier than any other variety of dwarf habit and very productive. Summer squashes should always be used when young and tender, which can be determined by an impression of the nail.

**Early Yellow Bush Scallop or Golden Custard.** A very early, flat, scalloped variety of largest size; color, yellow; flesh pale yellow and well flavored.

**White Summer Crookneck.** A large selection of the old "Summer Crookneck"; the skin is ivory white. The flesh is tender and of good flavor.

**English Vegetable Marrow.** An English variety for summer and fall use; grows about nine inches long and a perfect oblong in form; shell pale yellow, flesh white.



**ITALIAN MARROW SQUASH**

**Leonard Seeds are Never Commissioned**—To buy Leonard's Seeds is to avoid buying old seeds.

**Leonard Seeds are Sold in Bulk**—To buy Bulk Seeds is to see what is bought.

**Leonard Seed Co. are Growers**—To buy from a grower has many things to recommend it.



## SQUASH—Winter Varieties



**BLUE HUBBARD**

thick, fine grained flesh, which is very tender and by far the best flavored of the winter squash. This variety is very popular in the East, and brings a higher price than any other. We have the true stock.

**The Hubbard** cannot be too highly extolled as a Winter Squash; it boils smooth and dry, is of very rich quality, and keeps as solid as a rock. It is more popular with private growers than any other variety.

**Golden Hubbard.** This is a very distinct sort, of the shape and general character of the Hubbard, but a little smaller; of rich orange red color, instead of the dark olive green.

**Orange Marrow.** This is the earliest of all Winter varieties. Its distinctive feature and the one which will give it the earliest and most widespread popularity is its earliness; it is at least ten days earlier than any other long-keeping sort. It grows as long as the Hubbard, and is of as good quality.

**Boston Marrow.** Is the favorite Winter Squash of the Eastern States; it is of fine flavor, and a good keeper.

**Sibley or Pike's Peak.** Large oval fruits tapering at the blossom end; skin smooth and dark olive-green in color; flesh golden-yellow and of very best quality; a winter sort, maturing with Hubbard.

**Essex Hybrid.** An early, quick growing variety with hard shell.

**Mammoth Chili.** Grown for exhibition and stock feeding; specimens have been grown to weigh upwards of 150 pounds; fruits oblong, skin quite smooth but with broad, open netting and rich orange-yellow color.

**Hard Shelled Marrow.** The best sort for canning and drying. The fruit is very large, oval, of deep orange-red color and though quite smooth, has as hard a shell as the Hubbard. The flesh is very thick, of rich orange-red color without a tinge of green.

**Fordhook.** The vines are of strong, vigorous growth and wonderfully productive. Fruits oblong in form, eight to ten inches in length, slightly ridged; smooth, thin, yellowish skin; flesh very thick and of a light straw yellow.

**Delicious.** This is one of the best winter varieties. Its color is almost uniform of a green shade with occasionally a blue specimen, it being just about as pure in this respect as was the original Hubbard. In size it also closely follows the original Hubbard, which weighed between five and ten pounds. In thickness of flesh it surpasses nearly every variety, the color being a dark orange.

**Delicata.** Early and very prolific; of oblong shape. Ground color orange yellow, splashed and striped with very dark green. Although of small size, the squashes are very solid and heavy, while the quality is rich and dry.

**Leonard's Warty Hubbard.** This is the best strain of Hubbard Squash. By its rough, hard, warty shell and its dark olive green color, it can be distinguished from any other strain either in the field or on the market. It was introduced by us in 1894, and since that time under different names at different places, it has been given out to all who have called for the best stock of Hubbard Squash. We have maintained its purity and offer headquarters' seed. For keeping over winter this strain is superior to all others. It is the best shipping variety and the best seller.

**Blue Hubbard.** This excellent squash of the Hubbard type is light blue in color, with hard shell and



**GOLDEN HUBBARD**

## TOBACCO

**Connecticut Seed Leaf.** The best sort for cigar wrappers. Try it.

**Havana.** This is the genuine article and is first class.

## TOPEPO

**A new vegetable** of exquisite flavor combining the delicious qualities of the Pepper and the Tomato. This new vegetable is as large and looks like a Tomato but has a mild sweet flavor of a very mild Pepper. Is wonderful for stuffing, makes a beautiful display on the table and is being used by the fancy trade all over the country. We have tried this Topepo for two years and recommend it very highly.



## TOMATO

We grow the larger part of our tomato seed in Michigan; we grow this seed in separate fields for seed purposes only. Our tomato seed is saved from choice, ripe select tomatoes, grown only for seed purposes. **You cannot get any better tomato seed, no matter how high a price you may pay for it.** We grow tomato seed for many of the largest seed houses and canning factories throughout the United States.

**Culture.** The tomato requires one hundred days or more to mature from seed. As tomatoes are killed by other than light frost early tomatoes should be started in hotbeds two months before they may be transplanted out of doors. Three weeks later these plants may be potted or given a space of four by four inches in the hotbeds. Before setting in the field, which is May north of the Ohio, the plants should be gradually exposed to the outside conditions and the quantity of water given them decreased. Transplant on a cloudy day if possible, and water freely. Nitrate of soda may be given each plant at this time with profit.

A space of four by four feet should be given each plant in the field or more for robust varieties, except that where they are carefully pruned and trained, which is unnecessary, they may be planted as close as two by two feet. One ounce of seed gives two thousand plants.

**Earliana.** Vine similar in growth, maturing bulk of crop as early as Atlantic Prize, but the deep scarlet fruit is larger, distinctly smoother, solid and of very good quality. Early, smooth and of a large size, it is a particularly profitable tomato for market gardeners.

**Red Head (new early).** This exceptionally fine, large bright red variety is as early as the Chalks' Early Jewel, nearly as large as New Stone and very productive. Fruit almost globe shaped, very solid. An excellent variety for the market gardener.

**Chalk's Early Jewel.** We consider this one of the very best early tomatoes yet introduced. Vine vigorous and very productive. Fruit deep scarlet-red.

**John Baer.** An early red tomato, similar to Chalk's Early Jewel; very productive.

**Bonny Best.** Vines strong and vigorous, fruit deep scarlet, ripening to stem. Flesh firm. A productive and very desirable early and main crop variety.

**Gulf State Market.** The best of the early, purple-fruited varieties. In season with Early Detroit, while fruit is larger, smoother, more globe-shaped; very solid, free from cracking and productive.

**Leonard's Early Market.** A very prolific early red variety.

**Early Detroit.** Vines vigorous and productive. Fruit round and nearly globe-shaped. Firm and purplish-pink in color. Ripens with Chalk's Early Jewel, and is a splendid second early variety.

**Crises June Pink.** It is highly recommended to gardeners whose trade demands the purplish pink sorts. It is the earliest of this class of tomatoes and fills the place in them that Earliana does in the bright red sorts.



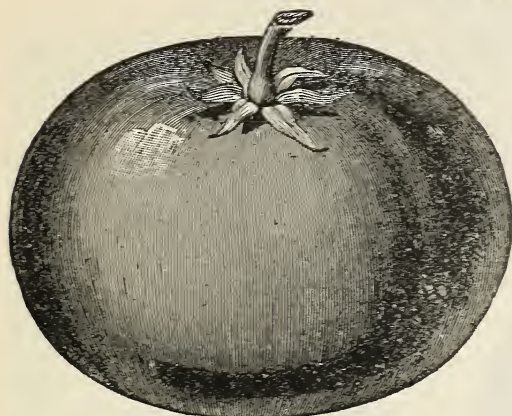
CHALK'S EARLY JEWEL



EARLIANA



## TOMATO



**GREATER BALTIMORE**

**Greater Baltimore.** Leonard's wilt-resistant strain. One of the best second early and main crop varieties. It is a red Tomato, vigorous and very productive. Preferred by many canners on account of its heavy yield.

**Acme.** The well known popular standard bright pink tomato.

**Beauty.** Large, solid, smooth; purplish pink. **Tucker's Favorite.** The finest large-fruited purple Tomato. The fruits continue of large size to the very last and are always unexcelled for slicing or cooking.

**Favorite.** Bright red, smooth, of good size.

**Perfection.** In our opinion identical with Paragon.

**Paragon.** The well known standard bright red Tomato.

**Matchless.** The best large-fruited bright red tomato. Matchless is well worthy of its name, beauty and symmetry of form. It is indeed without a fault.

**Coreless.** This variety has less indenture than any other of the red varieties. It has no corrugations at stem end, and absolutely no green core; for these reasons it is a model variety for canning and catsup.

**Trophy.** Very large, solid, and generally smooth; bright red.

**New Stone.** Vines vigorous and productive; fruits large, smooth, solid and deep red in color, very heavy. This is the favorite canners' variety.

**Red Rock.** An extraordinary solid, smooth, very red tomato; a very heavy producer, of excellent shape and very superior texture and flavor.

**Livingston's Globe.** It is of beautiful globe shape, with quite a percentage of elongated (stem to blossom) fruits, which permits a greater number of slices being taken than with flat fruited sorts. Color a beautiful glossy rose, tinged purple.

**Dwarf Stone.** As its name implies this is a dwarf variety bearing fruits similar to that popular canners' sort, the Stone.

**Dwarf Champion.** A purplish pink variety forming a strong, erect, bushy plant two feet high. Often sold as tree tomato. Fruit smooth, medium sized, fairly solid and of good flavor.

**Ponderosa.** A purplish pink tomato of largest size. Vine vigorous and very productive. Fruit very solid, fairly smooth and considered of very good quality, especially by those who prefer a tomato quite free from acid.

**Tenderloin.** Similar to Ponderosa.

**Beefsteak.** Similar to Ponderosa.

**Brimmer.** This is the largest and finest market tomato ever produced. Similar to Ponderosa but larger; single specimen often weighs 3 lbs. Fruit is solid and meaty, massive in size, delicious flavor, rich dark red color and almost seedless.

**Crimson Cushion.** A large fruited variety; smooth on the top but inclined to curve at the ends making an indenture at the stem. Color a glossy crimson tinged pink. Fruit ripens evenly, except toward the stem where it ripens somewhat slowly. A very solid, heavy tomato.

**McGee.** Originated in Texas. Very productive, average size and bright crimson color; solid and of excellent flavor.

**Red Current.** Small sort growing in clusters.

**Red Cherry.** Little fruits of a bright scarlet color.

**Red Pear.** This is a leading favorite for preserves and also to make "tomato figs." The fruit is bright red, of true pear shape, and of rich distinct flavor.

**Red Peach.** Shaped like a peach and has the peach appearance.

**Yellow Cherry.** The small yellow fruits, borne in clusters, average half an inch in diameter.

**Yellow Plum.** Plum shaped; yellow.

**Yellow Pear.** Pear shaped; yellow.

**Yellow Peach.** Same as the red peach except color.

**Golden Queen.** Fruit large and smooth; color a beautiful golden yellow, sometimes with a slight blush of red, as smooth and well shaped as the best of the red varieties and of superior flavor.

**Strawberry or Husk Tomato.** Plants of low-spreading growth and immensely productive. The small yellow fruits are each enclosed in a husk. Of very sweet flavor, highly esteemed for preserving or making pies.



**BEAUTY**

## TURNIP

**Culture.** While the main crop of turnips is planted in July north of the Ohio, more turnips should be grown in early spring. Seed may be broadcast on the few soils freed of weeds, but it is more advisable to sow in one or two foot drills, cover less than one-half inch and thin to stand six inches apart in the row. Use one-half ounce of seed to one hundred feet of row and two pounds to the acre. The turnip requires one-half more seed when broadcast than in drills and a salad turnip requires one-half more seed than the turnip sown for a root crop.

**Extra Early White Milan Turnip.** The Purple Top Milan is one of the most popular turnips for spring sowing, but in this new sort we have a splendid extra early turnip in which the extreme earliness, small top and tap root of the Purple Top Milan is united with clear white skin and flesh.

**Extra Early Purple Top Milan.** The earliest in cultivation, two weeks earlier than Purple Top Strap Leaf. The bulb is flat, of medium size, quite smooth with a purple top.

**Early Snowball.** A perfectly globe-shaped, white-skinned turnip. It is exceedingly productive. The flesh is fine grained, firm and of very delicate flavor. It is one of the best keeping of the white-fleshed sorts. Very early and particularly adapted for family or market use. We recommend it to market gardeners because its earliness and fine appearance make it a very profitable variety of turnip.

**Early White Flat Dutch.** An excellent garden variety. The best for spring sowing.



PURPLE TOP WHITE  
GLOBE

**Purple Top Strap Leaf.** Rapid grower and mild flavor, the most popular variety for early use, either for the table or stock.

**Purple Top White Globe.** An early, perfectly globed shape variety of good size and very attractive appearance. The roots are large, white with purple top. The flesh is white, fine grained and tender. They are best for table when about three inches in diameter, but can be grown much larger for stock feeding. Best variety for market gardeners.

**Cow Horn.** This variety is pure white except a little shade of green at the top, and is carrot-like in form, growing nearly half out of the ground, and slightly crooked.

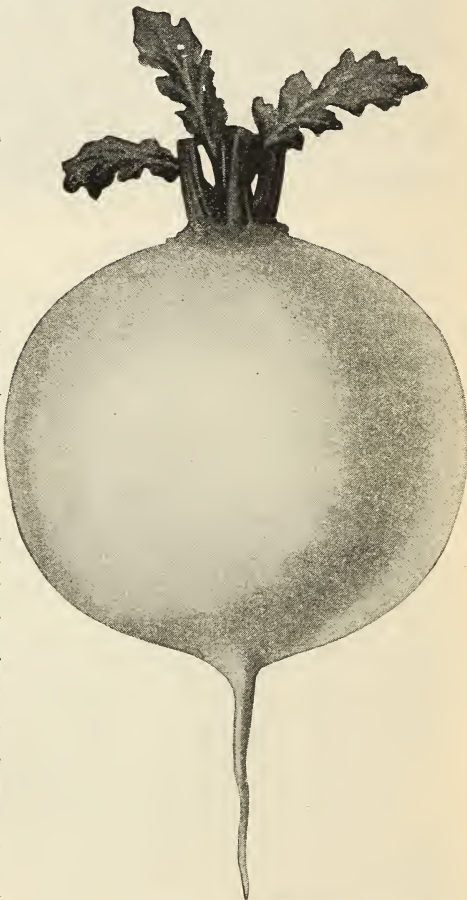
**Large White Norfolk.** The standard variety for field culture for feeding stock. Very large size.

**White Egg.** Belongs to the class of quick growing fall turnips, and for this purpose should be sown, in this latitude, between August 10 and 25.

**Pomeranian White Globe.** This is one of the most productive kinds, and in good, rich soil roots will frequently grow to twelve pounds in weight. It is of perfect globe shape; skin white and smooth; leaves large and dark green.

**Seven Top.** Cultivated extensively in the South for the tops, which are used for greens. It is very hardy and will grow all winter.

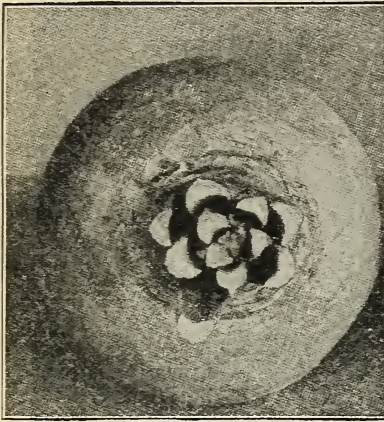
**Southern Prize.** Grown for the tops which are used as greens.



EARLY SNOWBALL



## TURNIP—YELLOW FLESH SORTS



**YELLOW ABERDEEN**

**Orange Jelly, or Golden Ball.** Undoubtedly among the most delicate and sweetest yellow fleshed turnips yet introduced. Not of a large size, but firm, hard and of most excellent flavor. Keeps well and is superior as a table variety. It is extensively used.

**Yellow Aberdeen.** Very hardy and productive, a good keeper; globe shaped. Color pale yellow, with purple top. Very firm in texture, and closely resembling the Rutabaga in good keeping qualities. Good either for table or stock.

**Large Amber Globe.** One of the best varieties for a field crop for stock. Flesh yellow, fine grained and sweet; color of skin yellow; top green. Hardy, keeps well, a good cropper. Very popular in the South.

**Yellow Stone.** A very desirable sort. The roots are of medium size, uniformly globular and perfect in shape, smooth skinned and of pale yellow color. The flesh is crisp, tender and of fine quality.

**Yellow Globe.** Very similar to the Yellow Stone and a very attractive sort.

## RUTABAGAS

**Culture.** Rutabagas, or Swedish Turnips, with their superior keeping qualities, had best be drilled a month earlier than other turnips, given eighteen to thirty-inch rows and thinned to stand six to twelve inches apart in the row.

**Improved American.** The best yellow fleshed, purple top variety grown for stock or table.

**Large Yellow.** A very heavy cropper similar to Improved American Purple Top, except that it has a green top. A good variety which is becoming more popular each year.

**Bangholm.** A very superior variety, both in form and quality, and held in high esteem in many parts of England. Of large size, small neck, few or no side roots, and yields well. Flesh yellow, sweet and solid; skin yellow with purple top.

**Laing's Improved.** One of the earliest of the rutabagas. Forms a handsome bulb of good quality. Keeps well; good for table use.

**Skirving's Purple Top.** A very heavy cropper. One of the best for field culture.

**Carter's Imperial Hardy.** An English variety resembling the preceding. Very productive and of fine quality.

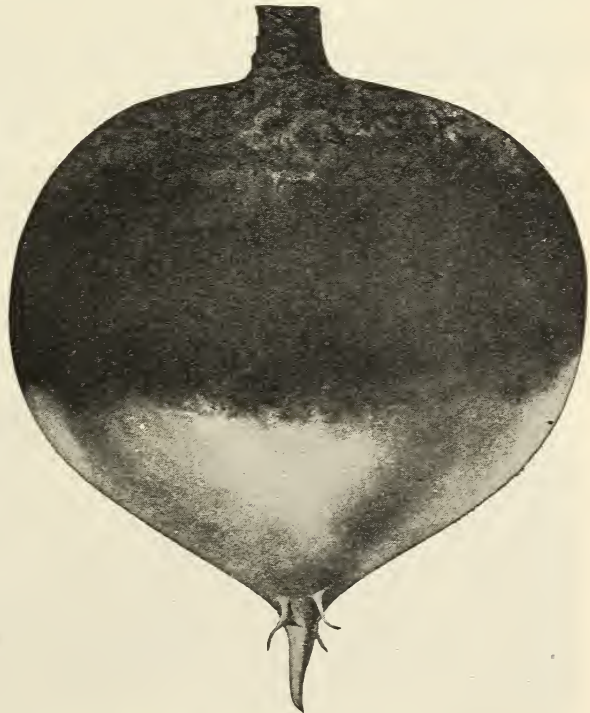
**White Rutabaga.** This variety is now very extensively cultivated, and preferred in many sections for its white flesh. It is very hardy and productive, keeps well until late in the spring, and is highly esteemed for its sweet, delicate flavor.

**Budlong's White Rock.** Though sometimes called a turnip this is more like a rutabaga. The root is large, both skin and flesh very white, and is one of the best varieties we have for table use. An excellent keeper and a desirable sort for market gardeners.

**Monarch or Tankard.** This is a yellow fleshed sort having very large tankard shaped roots, with relatively small necks and tops. Color purplish crimson above ground, yellow below; flesh very solid, fine grained and of the best flavor. This very popular variety is also sold as Hurst's Monarch and Carter's Elephant.

**Sweet German.** A superior variety for table or stock. Flesh firm, sweet and juicy.

**Macomber.** A very fine white rutabaga.



**IMPROVED AMERICAN PURPLE TOP**



## LEONARD'S LAWN MIXTURES



### SUGGESTIONS FOR THE PREPARATION AND CARE OF LAWNS

The ground should be thoroughly drained, and if not naturally rich, fertilizer should be added before sowing. Pulverized Sheep Manure is one of the best for this purpose. Four or five hundred pounds per acre is usually sufficient. For small plots twenty-five pounds to about four hundred square feet.

When seeding new lawns, work the soil by plowing or spading until thoroughly pulverized, being careful to leave the entire surface as near alike as possible, that the grass may be even in its growth; finish by harrowing or raking until made fine and finally level by use of heavy roller.

Seeding may best be done in the spring or fall. If done during the hot months of summer, the ground must be kept moist when sowing is made. With the ground prepared as directed, let the surface be gone over with a fine rake, and the seed evenly scattered, after which carefully rake or brush the seed in and follow with the roller.

To secure the best results use plenty of seed, one hundred pounds per acre being about the right quantity. One pound is sufficient for two hundred square feet. Let the grass obtain a good start before cutting, say a height of three or four inches, as the growth is retarded by too early cutting. When well rooted a lawn should be trimmed with a lawnmower about once in ten days. No lawns can be maintained long in good order without successive rollings, which work should be done in the spring before the ground becomes dry.

In very dry weather, a thorough wetting should be given frequently as the soil should not get baked. **Leonard's Chicago Park Lawn Grass Seed.** This is positively the highest grade mixture that can be prepared. It is composed of the seed of the finest English and American grasses with White Clover so that with even ordinary care it cannot fail to make a beautiful lawn. For quickly producing a permanent thick and velvety sward this brand cannot be excelled.

**Shady Nook Lawn Grass.** Usually it is quite difficult to obtain a satisfactory growth of grass under trees and in shady places. For sowing in such places we recommend the use of this special mixture. It will quickly produce an abundant and even growth of beautiful green grass.

### GOLF LINK MIXTURES

**Leonard's Putting Green.** Prepared for this purpose only of fine bladed grasses which do not form clumps.

**Leonard's Fair Green.** This mixture contains the seed of permanent hardy grasses which will not winter kill and will stand great wear.

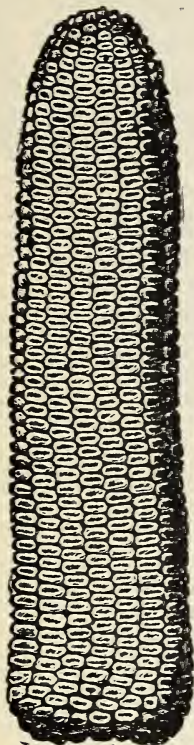


ONE OF OUR MANY ONION SEED FIELDS



## MISCELLANEOUS GRAINS AND FARM SEEDS

### FIELD CORN



**Reid's Yellow Dent.** This variety has won more prizes at corn shows than any other corn. It matures a ten-inch ear of eighteen to twenty-four rows in one hundred fifteen days.

**Pride of the North.** This famous corn still retains its popularity; an exceedingly early and prolific variety, always maturing in ninety days; often shelling sixty-two pounds of grain from seventy pounds of ears. Kernels closely set, large, of deep orange color; cob very small and red; stalks about seven feet in height.

**Improved Leaming.** The Improved Leaming Corn is a medium early yellow variety; large slightly tapering ears, deep grain, and medium sized red cob. In favorable years there is much uniformity of both kernels and ears.

**Champion White Pearl or Snowflake.** Originated in Illinois, and is enormously productive; a strong grower; matures in about one hundred days. The stalk is stout and thick, with large ears set low.

**Minnesota No. 13 or Wisconsin No. 8.** A ninety-day variety producing ears averaging eight inches in length with sixteen to twenty rows of bright, rich yellow, smooth, wedge shaped kernels, packed closely on the cob from tip to butt. The best yellow Dent for northern planting.

**Iowa Gold Mine.** A splendid yellow corn. Everyone who has tried it is enthusiastic in the praise of this splendid variety which was introduced in 1892. It has everywhere received the most cordial endorsement as one of the best and most profitable varieties ever grown.

**Iowa Silver Mine.** The Iowa Silver Mine is a splendid white corn. In 1894, the poor corn year, it yielded at the rate of ninety-seven and one-third bushels to the acre. It has no barren stalks. The ears are very even in size, being but little smaller at the tip than at the butt, and corn is well filled out over the tip.

**Longfellow Flint.** This is an eight-rowed Yellow Flint variety, the result of careful selection. The ears are from ten to fifteen inches long, one and one-half to one and three-fourths inches in diameter, are well filled out to the extreme end of cob.

**Evergreen Sweet Fodder.** Superior for summer and fall green feeding.

### POP CORN FOR SEED

#### IMPROVED LEAMING

**White Rice.** The most popular of the varieties with the popcorn men.

**White Pearl.** A very handsome, smooth grained variety.

**Golden Queen.** A fine yellow grained sort.

**Pop Corn for Popping.** This corn we run through our drier to put it in perfect shape for commercial purposes and must not be confused with what we offer above for seed purposes.

### GRASS SEEDS

**Canadian Blue Grass.** A very hardy perennial grass that grows six to twenty-four inches high. Used on hard clay or other poor soils for pasture and dairy purposes.

**Kentucky Blue Grass.** (*Poa Pratensis*.) It is the best pasture for our climate and soil, succeeding finely on hill lands and producing the most nourishing food for cattle. Fancy clean seed.

**Orchard Grass, or Rough Cocksfoot.** (*Daactylis Glomorata*.) This is one of the most valuable and widely known of all pasture grasses, coming earlier in the spring and remaining later in the autumn than any other.

**Red Top.** (*Agrostis Vulgaris*.) A valuable grass for moist soils and low lands. It is a good, permanent grass.

**Soudan Grass.** A late introduced annual grass that is probably a wild form of the Sorghum. It may be broadcast, drilled or cultivated in rows. Five to twenty pounds of seed will be required per acre, according to method of cultivation and under the various conditions will grow three to seven feet high. This drouth-resisting plant yields at two or three cuttings two to four tons of easily cured, dry hay of high feeding value.

**Timothy.** (*Phleum Pratense*.) This is decidedly the best grass for hay, making a large return on strong, rich clay, of medium state of moisture.

### CANADA FIELD PEAS

For the Northern States there is no crop of greater value than Field Peas and none is more neglected which can only be attributed to a lack of knowledge as to its merits. Whether for fodder, in mixture with oats, sown at the rate of two bushels each per acre, or the peas sown alone at the rate of three bushels per acre for plowing under, there is no crop that we can so strongly recommend for more extended culture.

**White Canada.** More used than any other.

**Blue or Green.** Like above except that color is a bluish-green.

### RUSSIAN SUNFLOWER

This is highly prized by poultry raisers and farmers as a cheap food for fowls. It is immensely productive and can be raised cheaper than corn, as any waste piece of ground will suffice. It is the best egg-producing food known.

**Hotbeds.** While early in the year plants may be started in a sunny window, it is of profit and advisable to use hotbeds and cold frames for even a small garden. From the first to the latter part of March is quite early enough to make a hotbed. The time must vary according to the latitude. Provide a quantity of fresh horse-manure from the stables, and add to this, if they can be had, one-third to one-half of its bulk of leaves. Mix them thoroughly, tramping down the mass in successive layers, and form into a large pile, so that fermentation will proceed, even in severely cold weather. In two or three days fermentation will be apparent by the escape of steam from the heap. Now turn again, and allow the heap to remain two or three days longer, or until the second fermentation commences. Make an excavation or pit two and one-half feet deep, and of a size suited to the number of plants required. The pit will be better if built of brick. It should be made in some dry, sheltered spot, facing the south or east, if possible. Hotbed sashes are usually three by six feet, and one or two sashes will give early plants enough for a small family. The frame for sashes should be eighteen inches high at the back and twelve inches in front, which will give the proper slope to catch the sunlight. Cross-pieces should be placed for the sashes to slide on, to facilitate opening and shutting the frames. When everything is ready, the manure is placed in the pit and trodden down firmly in layers to the required depth, two to two and one-half feet. Then put on the sashes, and keep the pit closed until the heat arises. At first it will probably be one-hundred degrees or more, which is too hot to sow the seed in; but in two or three days it will subside to ninety degrees or a little less, when the soil may be put on to the depth of six to eight inches. The heat may be readily ascertained by plunging a thermometer into the manure. The soil should be well-rotted sod (or common garden soil will do), mixed with about a third of fine old manure; and in this the seeds may be sown thinly in drills two to three inches apart and afterward (as soon as out of the seed-leaf), either thinned out or else transplanted to another frame. Air must be given every mild day by raising the sashes at the back. Water with tepid water whenever necessary, and during cold nights and snow storms keep covered with mats or board shutters. Tomatoes, Peppers and Eggplants should be sown in a separate frame from Cabbage, Cauliflower and Lettuce, as they require more heat. The same directions may apply to hotbeds made on the surface of the ground, except that the manure should be at least a foot wider on all sides than the frame.

**Cold Frames** are simply frames with tops of glass or cloth set on the ground, no bottom heat being applied. It is banked up on the outside during the winter with marsh hay, straw and coarse litter. The soil is prepared by forking in and thoroughly mixing to the depth of ten or twelve inches a liberal quantity of old, well-rotted manure. The manure of an old hotbed is good for the purpose. The frame is prepared in the fall, and young Cabbage, Cauliflower and Lettuce plants are set out in it in time to get well established before very cold weather. Cauliflower and Cabbage should be set down to the first leaf, and the soil made firm around the plants. The seed is usually sown, in this vicinity, from the 15th to the 20th of September. The young plants will be ready to transplant in about twenty-five to thirty days. During cold nights and stormy days the beds should be closely covered with the sashes, and these further protected by straw mats or shutters. Cauliflower needs more and closer protection than Cabbage, and it is rather more tender. During mild days admit air freely, the object being to keep the plants in a dormant state, without actual freezing, so that when spring comes, they are in a forward state for setting out. Seeds of Cabbage, Cauliflower, Lettuce and Radish may be sown in a cold frame in the spring from last week in February to the first week in March. The frame should stand in a warm and sheltered spot, and be kept from freezing by mats or a thick covering of straw during cold nights.

Frequently the application of lime or limestone is more necessary than the application of commercial fertilizer and this question, too, must be answered early.

Stones and stumps, along with trees of no value, should be removed from the garden, and every effort possible made to get ready for the rush that comes with spring planting. There are easy ways as against the difficult ways of gardening, and from time to time the work should be carefully thought over with the idea of saving every effort possible. First of all, the vegetables should be planted in long rows so with a wheeled tool like the Perfection Garden Cultivator one can quickly cultivate the garden without stooping. It is also possible now to set plants while walking in an upright position and avoid the backaches of other years by using a Masters' Rapid Plant Setter.

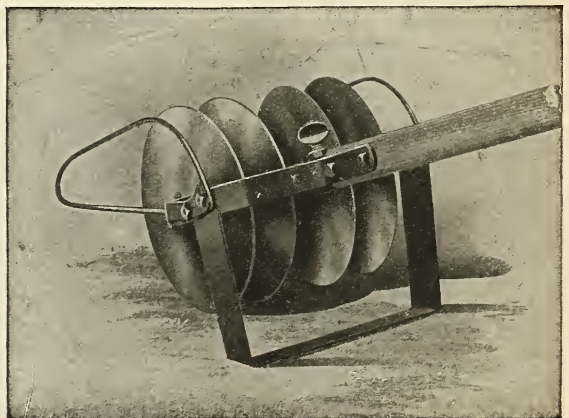
## PERFECTION GARDEN CULTIVATOR

**Different from Others—Superior to All**

- The lightest garden tool on the market.
- Easiest to adjust.
- Strongest in workmanship.
- Easiest to operate.
- Is a complete machine within itself.
- Needs no extra parts.

The only garden tool made that throws the soil to or from the plants without extra attachments.

No. 2. With four discs, on which seven and one-half, eight and one-quarter or eight and three-quarter-inch knives may be used.





# FLOWER SEED

Most flowers are as easy to grow as vegetables. The same practices that promote the growth of grains and vegetables and fruit apply to flowers. The same fertilizer it is well to use generously. Practically all flowers stand transplanting. Window boxes or hotbeds are good places in which to cradle the baby plants. The stored energy of seed is often somewhat in proportion to the seed's thickness, not its size. Cover the seed four times its least diameter. Drained, moist, warm, mellow soil should be the flowers' home; not soil that is wet or soil that bakes. True, there are plants that are difficult to grow, but these plants are few and respond to what we know to be ideal conditions for plants.

Flowers fall readily into three classes:

Annuals bloom, mature, seed and die the first year.

Biennials bloom and die in their second year; some of them give us bloom in the first year.

Perennials flower for several years and some of them may bloom in the first year of their existence.

**Acroclinium (a Strawflower), Double Mixed.** Beautiful everlasting flowers. Cut when they begin to expand.

**Ageratum Mexicanum, Mixed.** Suitable for pot culture or bedding, bearing in profusion clusters of feathery flowers. This mixture of colors contains the beautiful amethyst blue,

**Ailanthus, or Tree of Heaven.** This splendid ornamental tree is a native of China, where it is called the Tree of Heaven, from its great beauty. It is very hardy, and thrives in any soil, no matter how poor, and grows from six to ten feet high from seed the first summer. The leaves, from five to six feet in length, give it a grand appearance. Nothing outside the tropics can rival it for lawn decoration. Large panicles of bloom followed in season by great clusters of colored seed pods make the tree a continual thing of beauty.

**Alyssum, Maritimum Sweet.** Free flowering plants for beds, edging, etc. Useful for bouquets because of their delicate fragrance.

**Alyssum, Sweet, Little Gem.** Dwarf and compact, with plants a mass of white from spring until frost.

**Amaranthus, Caudatus (Love Lies Bleeding).** Rapid-growing garden annual with long, drooping crimson flower spikes; height 3 feet.

**Amaranthus, Salicifolius (Willow-leaved).** The leaves change in color from a bronzy green to a brilliant scarlet when the plant attains age.

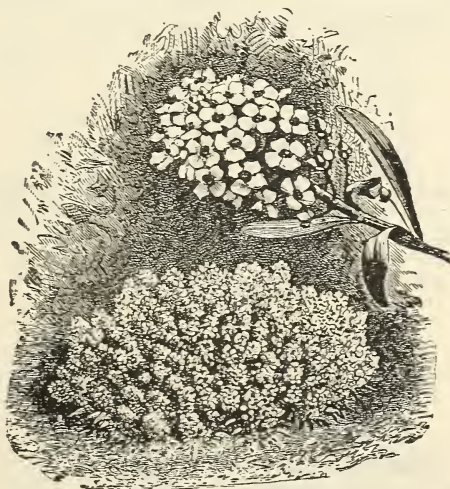
**Amaranthus, Tricolor (Joseph's Coat).** Very brilliant.

**Ampelopsis, Veitchi (Boston Ivy).** The favorite hardy climber with large five-lobed leaves turning to a bright red color late in the fall.

**Antirrhinum (Snapdragon).** Tall, finest mixed. An old garden favorite of the easiest culture; very showy, flowering the first season from seed, yielding an abundance of fine flowers for cutting.

**Antirrhinum (Snapdragon).** Good Mixed.

**Arctotis Grandis (The African Lilac Daisy).** Handsome bushy annual two feet high, flowering abundantly from early summer until late autumn. The beautiful, daisy-like flowers, 2½ inches across, are white, shaded with pale lilac and zoned with yellow.



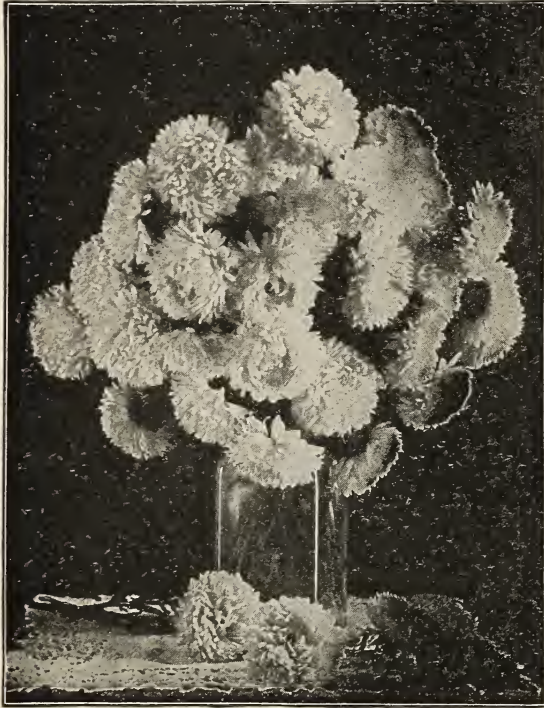
ALYSSUM—LITTLE GEM



## ASTERS

Of the general beauty of these flowers it is unnecessary to speak; the immense world-wide demand for them shows their adaptability for any climate; and, coming into bloom, as they do, when most other flowers are fading away, enhances their value. For the best results the ground for the cultivation of Asters cannot be too richly prepared, although they will give satisfactory returns on any ordinary garden soil.

**Aster, Queen of the Market.** These well-known, early-flowering Asters are of a branching habit, about 18 inches high, and one of the most useful types for early market purposes.



ASTER

**Aster, Queen of the Market.**

Dark Blue.  
Flesh Pink.  
Light Blue.  
Rose.  
Scarlet.  
White.  
Finest Mixed.

**Aster, Giant Comet or Crego.** Plants robust, about two feet high. Flowers large, double and well formed, making a fine variety for all purposes.

**Aster, Giant Comet or Crego.**

White.  
Pink.  
Crimson.  
Azure Blue.  
Deep Rose.  
Purple.  
Rose Pink.  
Finest Mixed.

**Aster, American Branching.** Plants  $2\frac{1}{2}$  to 3 feet high, branching and robust habit. Flower large and double, throwing no single flowers.

**Aster, American Branching.**

Azure Blue.  
Crimson.  
Purple.  
Deep Rose.  
Rose Pink.  
Sensation, Brilliant Dark Red.  
White.  
Finest Mixed.

**Aster, Heart of France.** Rich dark red. Plants about 2 feet high, branching habit. Flowers medium size.

**Aster, Betteridge's Quilled Yellow.**

**Aster. All Varieties Mixed.**

**Balloon Vine.** Ornamental climbing plant, remarkable for an inflated membranous capsule from which it derives its name.

**Balsams (Lady Slippers).** Beautiful half-hardy annuals, from one and one-half to two feet in height. Sow the seed early in frames and transplant to a well enriched border.

**Balsam, Double Camellia-Flowered Mixed. Tall Double Mixed.**

**Bellis, or Double Daisy.** Choice Mixed. Charming plants for edging and dwarf beds, blooming the first year from seed. Thrive well in shady places.

**Calendula, Double Orange King.** The seed should be started early indoors in pots or may be sown in shallow drills in the flower-bed early in spring, when the trees are starting out in leaf. Calendulas are excellent for borders or beds and last a long time in water as cut-flowers.

**Calendula. Mixed varieties.**

**Calliopsis, or Coreopsis.** One of the most showy of all annuals, the colors being so striking as seldom to be passed without a remark.

**Calliopsis, Drummondii (Golden Wave).** Very bushy and compact. A mass of bright, golden color from July to October. Flowers two inches across, with small dark centers. Mixed.

**Campanula, Medium (Canterbury Bells).** Single mixed. Very ornamental, growing about two feet high, producing beautiful, large, bell-shaped flowers, which make a glorious display when planted in large beds.

**Canary Bird Vine.** A highly ornamental creeper, with exceedingly beautiful yellow fringed flowers and finely divided foliage.

**Candytuft.** Showy, hardy annuals, very useful for edgings and masses, excellent for cutting; continuous bloom from July to October.

**Candytuft, Coronaria. Empress White.**

**Umbellata. Finest Mixed.**

**Dwarf Umbellata, Hybrida Mixed.**

**Carnation, Margaret Mixed.** These carnations have created a universal sensation, not only on account of their beautiful colors, but, unlike all others, they bloom in about four months from sowing the seed. Bloom until checked by frost.

**Celosia, Cristata (Coxcomb).** Finest Mixed Dwarf. Very popular annuals of easy culture, producing large, ornamental, comblike heads resembling ruffled chenille. They are prized for summer flower beds and make fine pot plants; height, 12 to 18 inches.

**Celosia, Tall Mixed.**



**Celosia, Childsii, Chinese Wool Flower.** The flowers are ball-shaped and resemble a ball of wool. The plants will average 2 feet in height. They branch freely and by midsummer are simply covered with blooms. It keeps blooming all during the fall and retains its full beauty and color until severe frost destroys it.

**Centaurea, Cyanus, Double Finest Mixed (Bachelor Button).** A showy, hardy annual succeeding well in any soil, and bearing a profusion of flowers in shades of pink, blue and purple.

**Single Mixed (Bachelor Button).**

**Sweet Sultan (Mixed).**

**Dusty Miller.**

**Chrysanthemums.** Handsome hardy annuals producing quantities of large flowers of striking colors, making a brilliant display.

**Chrysanthemums, Carinatum, Single Tricolor. Double Mixed.**

**Cosmos.** A very effective autumn flowering plant, with beautiful foliage, growing from six to eight feet high, literally covered with very large, single daisy-like flowers, in shades of rose, purple and white. For cutting, this is one of the finest flowers grown. Sow in April in pots or in the hot bed, and transplant one foot apart.

**Cosmos, Extra Early Mammoth Flowering Mixed.** In this splendid mixture are monster pink and white flowers, beautiful crimson shade, delicate white and mauve, daintily tinted and clouded with pink and mauve. Some large, white blossoms have broad plaited petals and pinked edges.

**Cypress Vine.** Most beautiful and popular tender climber with very delicate, fern-like foliage and numerous flowers.

**Cypress Vine. Mixed.**

**Dahlia.** Sow the seeds early in pots or under glass, and transplant to strong, deep, rich soil, and plants will bloom the first season.

**Dahlia, Single Varieties.** Splendid mixture. Handsome bedding plant, and extensively used for cutting.

**Dahlia, Double Mixed.** Seeds saved from fine named sorts.

**Daisy, Shasta, Alaska.** Is perfectly hardy, grows anywhere and blooms more abundantly each season. The flowers are very large, a foot or more in circumference, growing on large stems, with two rows of broad, pure white petals and a yellow center.

**Delphinium (Perennial Larkspur).** Flowers remarkable for their great beauty, diversity of shades, and striking appearance. Desirable for mixed borders. If sown early will bloom first year from seed.

**Delphinium Hybridum.** Fine mixed, splendid.

**Dianthus Pinks.** These flowers are without a superior among annual garden plants. Bloom continually all summer long and are most beautiful and lasting cut flowers. Of easy culture and bloom the first year from seed. Very fragrant.

**Dianthus Pinks, Chinensis, Double Mixed.**

**Heddewigii, Finest Single Mixed.**

**Heddewigii, Finest Double Mixed.**

**Escholtzia (California Poppy).** A very showy plant, about one foot high, blooming from June until September. Produces a brilliant effect at a distance when grown in a mass. Hardy.

**Escholtzia, Finest Mixed.**

**Euphorbia (Snow-on-the-Mountain).** Leaves edged with pure white.

**Fox Glove (Digitalis). Finest Mixed.** Very ornamental amongst shrubbery, producing tall spikes of showy flowers of purple, rose, white and yellow.

**Gaillardia.** One of the most showy and brilliant of garden flowers, fine for bedding and cutting, producing large flowers of rich shades throughout the summer.

**Gaillardia, Grandiflora, Finest Mixed.**

**Double Mixed (Annual).**

**Single Mixed (Annual).**

**Geranium, Good Mixed.** Saved from some of the finest collections; many choice and entirely new varieties may be expected.

**Globe Amaranth (Gomphrena).** Tender annuals about 2 ft. high, very ornamental in the garden. The flowers will retain their beauty for a long time if gathered and dried as soon as they are open.

**Gourds, Mixed Varieties.** Rapid growing, interesting annual climbers, with ornamental foliage and singular shaped fruit, 15 to 20 feet.

**Dipper.**

**Gypsophila, Elegans Alba (Baby's Breath).** Pretty, free-flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers.

**Helichrysum, Monstrosum (Strawflower). Finest Mixed.** Ornamental in the garden and desirable for winter bouquets.

**Hollyhocks.** Seeds should be sown in June or July to have flowering plants the next summer, or, if sown in the house early in the spring they will bloom the first year.

**Hollyhock, Allegheny, Finest Mixed.**

**Annual Single, Finest Mixed.**

**Choice Double Mixed.**

**Hyacinth Bean (Dolichos) Mixed.** Annual climbers of rapid growth, 10 feet high, with Wistaria-like clusters of flowers, followed by bronzy-purple seed pods.

**Ice Plant (Mesembryanthemum Crystallinum).** A singular looking, tender annual, with thick fleshy leaves that have the appearance of being covered with crystals of ice.

**Ipomoea, Moonflower, White Seeded.** At night and during dull days the plants are covered with an abundance of large, pure white, fragrant flowers, 5 to 6 inches in diameter. It grows very rapidly and will cover a large surface.



ESCHOLTZIA—CALIFORNIA POPPY

**Ipomoea (Japanese Morning Glory). Imperialis Mixed.** The flowers of this variety are of largest size, often three inches or more across; some are brilliant red or rich blue, others are equally brilliant, with broad margins of clear white; some are striped or dotted with blue or red on white or lemon yellow ground, others are clouded with blue and red. The foliage in some plants comes plain green, in others it is mottled with white and shades of yellow or yellowish green. Seed black, larger than other varieties of Morning Glory.

**Job's Tears (Coix Lachrymae).** The seeds are strung up in the same way as beads. A strong grower with large deep green leaves, growing 3 feet tall. Seeds very freely.

**Kochia Childsii (Summer Cypress), (Burning Bush).** The plants are always of globe-like form, branching freely, the stems being covered with delicate light green foliage. Early in the fall the ends of the shoots are thickly set with small bright scarlet flowers, the bushy plants resembling balls of fire. Very showy when planted singly to show the round ball-like form.

**Lantana, Mixed.** This showy greenhouse plant forms a small bush, covering itself with pink, yellow and orange flowers and also flowers of changeable color. Start in the house. Fine varieties mixed.

**Larkspur.** Very beautiful hardy annuals producing dense spikes of flowers which are very decorative.

**Larkspur, Dwarf Mixed, Double.**  
**All Sorts, Mixed.**

**Lathyrus, Latifolius Mixed (Everlasting Peas).** Showy, free-flowering hardy perennial climbers for covering old stumps, fences, etc. Continually in bloom, fine for cutting.

**Linum, Grandiflorum Rubrum (Scarlet Flax).** This is a very pretty dwarf annual. The rich crimson flowers last only a day but they are borne continuously until frost. Makes a splendid subject for massing or may be planted as edging for borders or lawn.



NASTURTIIUM

**Lobelia, Mixed.** The annual Lobelias are plants of dwarf growth, 4 to 6 inches in height, covered with numerous small star-like flowers. The compact varieties are very pretty when grown as an edging for flower-beds or in formal beds. The seed should be sown in boxes filled with fine soil and placed in a warm, sunny window, or in shallow drills outdoors when the trees are starting out in leaf, barely covering the seed from view. The plants will bloom continuously from June until frost.

**Lupins, Blue.** Showy, hardy plants from 2 to 3 feet high, producing spikes of attractive flowers.

**Lupins, Yellow.**

**Marigold.** The African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The former have uniformly large yellow or orange-colored flowers; are well adapted for large beds or mixed borders. The latter are dwarfer in growth, with beautifully striped flowers and better suited for bedding purposes or for pot culture. They succeed best in a light soil, with full exposure to the sun.

**African Tall Double Finest Mixed.**

**French Tall Double Finest Mixed.**

**French Dwarf Double Finest Mixed.**

**Marvel of Peru (Four O'Clock). All Colors Mixed.** A well-known, handsome, free-flowering garden favorite; does well anywhere. Give each plant 12 to 18 inches of room.

**Mignonette.** A general favorite on account of its delightful fragrance. Blooms throughout the season. Sow from middle of April to middle of June.

**Mignonette, Odorata, Grandiflora.**

**Special Mixture Large-flowering Sorts.**

**Matchet.**

**Morning Glory (Convolvulus Major) Mixed.** Climbing plants; unequalled for rapidity of growth and profusion of bloom, annuals attaining height of 30 to 50 feet.

**Giant Japanese (See Ipomoea).**

**Myosotis (Forget-Me-Not).** A very pretty, little hardy perennial, about 6 inches high. Will thrive best in a cool, moist situation, and is well adapted for bedding or rock-work.

**Alpestris, Blue.** Dwarf, free-flowering bushes. Excellent for borders or beds. Light blue flowers, standing out sharply from the rich green foliage.

**Alpestris, Mixed.**

## NASTURTIIUM

There is no plant that in so short a time at so little expense will give such an abundance of bloom, continue that blooming over so long a period and give such variety and brilliancy of color as the Nasturtium. On a rich soil this plant gives us a more robust growth and fewer flowers, so the thinner soil is to be used if there is a choice. When the frost is no more to be feared, sow the seed one inch deep where the plant is to grow and remember to pick the seed balls as they form, to continue the plant's blooming. This sweet-scented plant lasts long as a cut-flower but is most frequently used as a tapestry to blanket some unsightly fence or pile of stone.

**Nasturtium, Mixed. (See Page 29).**



**TALL OR CLIMBING**

Tall Crimson.  
 Dunnett's Orange. Bright orange.  
 King Theodore. Rich deep red.  
 Scarlet. Rosy scarlet.  
 Schultzei. Dark scarlet.  
 Lobbianum, Tall Gant of Battles. Amber yellow, spotted bright red.

**DWARF**

Cloth of Gold. Flowers scarlet, foliage yellow.  
 Empress of India. Deep crimson, dark leaved.  
 Golden King. Yellow flower. Dark leaves.  
 King Theodore. Rich red.  
 Ruby King. Bluish rose.

**Nicotiana, Affinis, Hybrids, Choice Mixed.**  
 Fine for bedding or for planting as a background in borders for lower growing plants. The seed should be started indoors in March and the plants set out in May when the weather has become warm. The stately plants bloom from midsummer on.

**Nigella, Hispanica (Love-in-a-mist).**  
**Choice Mixed.** A curious plant about one foot high, with finely cut leaves and single flowers.

**PANSIES**

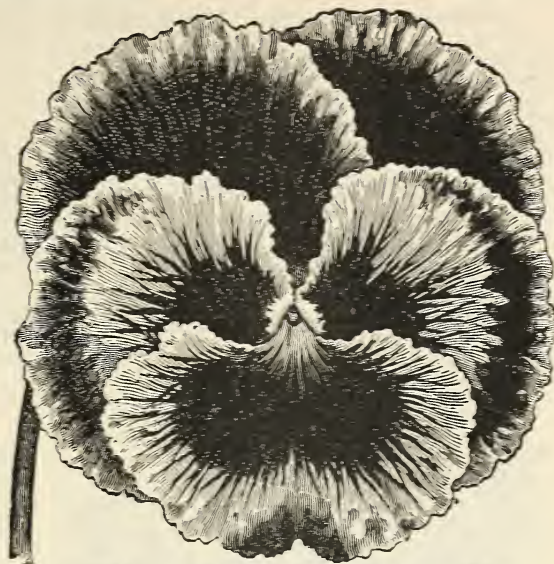
**Pansy.** Seed may be sown indoors very early in spring, or a little later in the open ground, and transplanted when an inch high. Such plants will commence to bloom in June. If sown in July, the plants will bloom in the fall, or if sown in September, the following spring. Well pulverized soil should be used and the seeds covered one-eighth to one-fourth inch deep with fine soil firmly pressed down. The largest and best flowers are produced by young plants which have been grown rather slowly in a partially shaded situation and in a very rich soil; coolness and moisture are necessary. A situation sheltered from high winds and exposed to the morning sun is most favorable and frequent sprinklings are advantageous. Grown indoors, pansies make a good winter blooming pot plant. Hardy perennial but usually grown as an annual or biennial. Four to six inches high.

**Pansy, Masterpiece, Giant Frilled.** This strain comes nearer to the Double Pansies than anything ever introduced under that name. In reality the number of petals is the same as that in any other pansy flowers but they are crimped and curled in such a fashion that the flowers appear double. The flowers are of enormous size, often three inches across, and the color variations and combinations are odd and striking.

**Pansy, Bugnots, Large Blotched, Extra Choice.** This splendid variety produces flowers of immense size and of the most varied and attractive markings and colors.

**Leonard's Special Strain of Giant Five-Spotted Pansy.** Enormous size Pansies of rich, velvety texture.

**Trimardeau Giant.** The blossoms are simply enormous, perfect in form and run through all the varieties of colors, from the lightest shade to the darkest purple. Marked with three large blotches.



PANSY, LEONARD'S GIANT FIVE-SPOTTED

**Good Mixed.** A very good strain in a great variety of colors.

**Petunia.** For outdoor decoration or house culture, few plants are equal to this class. They commence to bloom early and continue to flower through the summer. Give them a rich soil and a sunny place.

**Petunia, Hybrida. Special Mixed.**

**Good Mixed.**

**Grandiflora, Single Fringed.**

**Phlox.** In its great variety of rich colors, probably the most brilliant of all annuals. Fine for bedding, making a dazzling show throughout the entire season.

**Phlox Drummondii, Choice Mixed.**

**Star Mixed.**

**Poppy.** Showy, large, brilliant colored flowers, growing freely in any garden soil. Produce a fine effect in clumps or beds.

**Poppy, Double Carnation Flowered, Finest Mixed.** Splendid double-fringed flowers, mixed colors.

**Poppy, Double Paeony Flowered, Finest Mixed.** Large, showy, double globular flowers, resembling a double Paeony. Mixed colors.

**Poppy, Shirley.** The absence of black gives them their wonderful light, bright tissue-paper-like appearance. The colors range from purest white, through pinks of all shades, to glowing scarlet, but a scarlet without black.

**Double Shirley Eldorado. Fine Mixed.**

**Single Shirley. Finest Mixed.**

**Single Shirley. Good Mixed.**

**Tall, Single, Annual Mixed.**

**Dwarf, Single, Annual Mixed.**

**Poppy, Orientale, Choice Mixed.** Among hardy perennials these hold an unrivaled position for gorgeous effectiveness in gardens and hardy borders. Height 2 to 3 feet; flowers immense, often 6 inches or more across. They are also grand, cut in bud state, for vases. The seed should be sown in the open ground in June or July in order to bloom the following summer.



**Portulaca, Single, Fine Mixed.** Brilliant garden annuals, 6 inches high, luxuriating in warm, dry, sunny situations and blooming profusely from early summer to autumn. For low beds and masses of color, from spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, striped, white, etc.

**Portulaca. Double Fine Mixed.**

**Ricinus (Caster Oil Plant).** A highly ornamental, half-hardy annual, growing from four to six feet high, presenting quite a tropical appearance; select warm, dry soil and plant six feet apart.

**Zanzibariensis (Zanzibar Caster Bean).** Very showy, with gigantic leaves which range from brilliant coppery-bronze to light and dark green; the ribs also are bright colors, making a beautiful contrast with the leaves.

**Salpiglossis, Variabilis Grandiflora, Finest Mixed.** Flowers two to three inches in diameter, vividly marked, spotted and striped on ground colors of deep blue, rose, violet, yellow, reddish bronze, purple, etc. In rich coloring they vie with Orchids in mixed colors.

**Salvia Splendens (Scarlet Sage).** Very ornamental plants, two feet high, producing tall spikes of gay flowers. Sow early in hotbed, or in pots in the house, and transplant two feet apart. Half hardy.

**Fireball.** A compact type and popular for beds and borders requiring a variety of dwarfer habit than the regular Scarlet Sage.

**Scabiosa (Mourning Bride). Large Flowering. Tall Double.** A class of beautiful hardy annuals, from 1 to 2 feet high; valuable for cutting, as they remain a long time in bloom and do not droop easily.

**Stocks.** Half-hardy annuals, producing splendid spikes of very rich and beautiful flowers of delightful fragrance. For early flowering sow early in spring in pots or in hotbed, and trans-

plant one foot apart. Bloom from June until November.

**Stocks, Large Flowering Dwarf Ten Weeks, Finest Mixed.**

**Mammoth Early Branching. All Colors Mixed.**

**Sunflower (Helianthus) Dwarf Chrysanthemum Flowered.** Magnificent flowers 6 to 8 inches in diameter, densely double, the petal long and fringed; color, rich orange. The plants, 6 to 7 feet high, carry many of these noble flowers.

**Sweet William.** Well-known, beautiful, hardy perennials, about one foot high, making a most splendid appearance in May and June.

**Sweet William, Double Mixed.**

**Single Mixed.**

**Annual Finest Mixed.**

**Verbena, Mammoth, Choice Mixed.** They thrive in almost any situation and in all good garden soils. They make attractive borders and beds, blooming profusely from June until October. Fine for pot culture. Sow the seed during March or April indoors, and set out during May.

**Hybrida, Good Mixed.**

**Vinca (periwinkle) Mixed.** Are most attractive with their dark green, glossy leaves and their beautiful and large flowers. The compact plants grow 15 inches tall. Whether used for borders or solid beds, they will always attract attention. The flowers measure 1½ inches across. Sow the seed thinly after the trees are out in leaf and thin out to six inches.

**Wild Cucumber.** One of the quickest-growing climbers. It will grow 30 feet in one season, with a wide spread of beautiful green foliage, which is thickly dotted over with pretty white flowers, which, in turn yield an abundance of small, ornamental and prickly fruit, giving it an attractive appearance throughout the season. Once planted, it will seed itself and come up every year.

**Wild Flower Mixed.** A splendid mixture of beautiful, free-blooming, hardy flowers, which can be offered at a much less price than when sold separately.

**Zinnias.** This old garden favorite has been much improved and the fine strain of giant-flowered varieties and other remarkable new forms are taking place in our flower-gardens. Zinnias grow well and bloom freely even under the most adverse circumstances of location and weather and may be counted upon for a continuous show of blooms from July until frost. Sow the seed outdoors as soon as the nights are quite warm. To secure early flowers, sow the seed indoors the middle of March and transplant into the garden early in May. The giant varieties grow two to three feet tall and bear a profusion of mammoth size flowers measuring four and even five inches in diameter.

**Zinnia, Dahlia flowered.** All colors mixed.

**Zinnia, Double Giants.** All colors mixed.

**Zinnia, Elegans Tall Double.** All sorts mixed.



ZINNIA, DAHLIA FLOWERED



## SWEET PEAS

If possible, for Sweet Peas spade deeply a well-drained soil in the fall and add any good compost, including some wood ashes or lime. As early as the ground can be worked in spring plant the peas in a trench five inches deep and cover with one inch of sand or fine soil. When the peas are well above the ground fill the trench and thin the peas to stand two to three inches apart in the row. When planted, or very soon afterward, set some four to five-foot supports. Mulch with lawn trimmings, water thoroughly once a week and cut frequently to keep the plant flowering.

### MIXED SWEET PEAS

**Choice Mixed.** A studied and carefully made good mixture of all the standard sorts, not a haphazard throwing together of whatever may be found. A statement we feel we should repeat for you is this, that for the price there are no Sweet Peas sold that compare with our Choice Mixed Sweet Peas.

**Eckford Mixed.** A very choice mixture of the Grandiflora types.

**Leonard's Fancy Mixed.** The best blending of the choicest named varieties. No better mixture can be had.

**Spencer Varieties Mixed.**

### GRANDIFLORA VARIETIES

**America.** Crimson scarlet striped on white.

**Aurora.** Orange rose, striped on white.

**Black Knight.** A very deep maroon.

**Blanche Ferry.** Standard bright carmine rose, wings white tinged with pink.

**Countess of Radnor.** Light mauve standard, lavender wings.

**Dorothy Eckford.** Pure white.

**Helen Pierce.** Pure white, veined, mottled and marbled with bright blue.

**Hon. Mrs. E. Kenyon.** Light primrose.

**Janet Scott.** Deep pink.

**Katherine Tracy.** Standard soft pink, wings a trifle lighter tone.

**King Edward VII.** Bright red or crimson scarlet.

**Lady Grisel Hamilton.** Standard light mauve, wings lavender.

**Lord Nelson.** Rich deep navy blue.

**Miss Wilmott.** Orange pink.

**Mrs. Walter Wright.** Rose purple.

**Othello.** Deep maroon.

**Queen Alexandra.** Deep scarlet.

**Prima Donna.** Pure pink self.

### SPENCER VARIETIES

**Apple Blossom.** Bright rose standard with wings of very light primrose, flushed or tinted rose-carmine. Very large Spencer form.

**Asta Ohn.** Pinkish lavender, the wings showing a little more clear lavender than the standard. Robust vines and good sized flowers.

**Bridesmaid.** Large cream-pink.

**Countess.** Bright, clear pink on white ground.

**Constance Hinton.** Flowers open blush but change to pure white. Of largest size, splendid form and superior substance. Seed black.

**Fiery Cross.** A brilliant orange cerise. Flowers open pale but deepen with age.

**George Herbert.** A bright rose-crimson suffused with magenta and showing veins in wings. Both standard and wings beautifully waved.



SWEET PEAS

**Illuminator.** Bright glowing salmon tinged with orange. Very satisfactory under artificial light.

**King Edward.** A rich and brilliant crimson. This variety is a vigorous grower and produces flowers of large size and beautiful form.

**King White.** The form, size, vigor, waviness and purity of color give pre-eminence to its claim as the best white Spencer yet introduced.

**Maroon Prince.** The flowers are of great size, beautifully waved and borne freely in threes and fours. Color a rich, deep glowing, reddish maroon.

**Royal Purple.** Rich royal purple. The color deepens as the flower ages which is a desirable quality in a purple variety. The best purple Sweet Pea.

**Senator.** A large and fine striped; seal-brown and claret flakes on white.

**Wedgwood.** Bright silvery blue. Large, well-waved flowers on long stems. An attractive and very desirable shade.

# SUMMER FLOWERING BULBS

## Choice Selected Bulbs

Ready for Shipment About March 1st to 15th

### GLADIOLI

Standard Mixture.

Primulinus Hybrids. Mixed.

America. Soft lavender pink, very light, almost a tinted white.

Arizona Rose. Pink, dark throat.

Brenchleyensis. Intense fiery scarlet.

Chicago White.

Myrtle. Tender, delicate rose pink.

Niagara. Flowers cream shade blending to canary yellow, splashed with carmine.

Panama. Resembles America except that it is a much deeper pink.

Peace. White feathered with pale lilac.

Rose 1910. Pure rose pink.

Schwaben. Best yellow.

War. Deep blood red.

Yellow Bird. Penciled with dark wine color on lower petals.

Primulinus. Alice Tiplady. Orange-saffron.

### CANNAS—LARGE FLOWERING

Alphonse Bouvier. Five feet. Rich variety red.

Chas. Henderson. Four feet. Brilliant crimson, flame yellow throat.

The President. Four feet. Flaming scarlet. The best red.

Souv. D'Antoine Crozy. Three feet. Red bordered yellow.

King Humbert. Scarlet. The great favorite.

Mrs. Alfred Conard. Salmon pink.

Florence Vaughn. Five feet. Yellow spotted crimson.

Yellow King Humbert. Four feet. Deep rich yellow spotted bright red.

### PAEONIES—EXTRA STRONG 3-5 EYE DIVISIONS

White.

Red.

Pink.

Mixed colors.

### DAHLIAS—DOUBLE LARGE FLOWERING

Red shades.

Pink shades.

Yellow shades.

White shades.

Variegated shades.

GLADIOLI

Flora. Golden yellow, large pure flowers.

Halley. Salmon pink.

Ida Van. Orange red of brilliant tint.

Lena Graetz. Almost pure white.

Miss Edith Cavell. Pure white with small violet stripe.

Mrs. Frances King. Pink.

Mrs. Dr. Norton. Soft white petals La France pink.

Mrs. Frank Pendleton. Bright rose pink on a pure white ground, contrasting in a most striking way with the deep rich, velvety blood red blotch on the lower petals.

Mrs. Watt. American Beauty shade of red.

### MISCELLANEOUS BULBS

Tuberoses. Double pearl.

Tuberoses. Single.

Caladium Esculentum.

Madeira Vines.

Cinnamon Vines.

Giant Flowering Marshmallows. Strong two-year-old roots.

### HARDY LILIES

Lilium Auratum.

Lilium Speciosum Magnificum or Rubrum.

Lilium Speciosum Album.

Tritoma, Everblooming (Pfitzeri).



## SPRING FLOWERING BULBS

Must be Planted in the Fall

Do not overlook the Spring Flowering Bulbs such as Tulips, Hyacinths, Narcissus, etc. These must be planted during October or November and are usually ready for delivery the latter part of September or early October. Our bulbs are the choicest Holland grown bulbs imported from the best growers. We list only a few of the most popular kinds but can supply all standard varieties at reasonable prices.

### SINGLE EARLY TULIPS

**Artus.** Bright scarlet.  
**Belle Alliance.** Scarlet.  
**Cottage Maid.** Dark rose with white shade.  
**Rose Gris De Lin.** Blush white edged delicate rose.  
**Chrysolora.** Pure golden yellow.  
**La Reine.** White, slightly shaded rose.  
**L'Immaculee.** Pure white.  
**Keizerskroon.** Crimson scarlet edged bright yellow.  
**Joost Von Vondel.** Red feathered white.  
**Single Mixed.**

### DOUBLE EARLY TULIPS

**La Candeur.** Pure white.  
**Tournesol, Red and Yellow.** Red bordered yellow.  
**Rubra Maxima.** Dazzling scarlet.  
**Murillo.** Blush pink.  
**Double Mixed.**

### SINGLE LATE OR "COTTAGE" TULIPS

**Mrs. Moon.** Golden yellow.  
**Late Mixed.**

### BREEDER TULIPS

**Bronze Queen.** Soft buff, inside tinged golden bronze.  
**Breeder Mixed.**

### PARROT TULIPS

**Parrot Mixed.**

### DARWIN TULIPS

**Baronne de la Tonnaye.** Vivid pink, margined blush.  
**Bartigon.** Fiery crimson.  
**Clara Butt.** Delicate salmon pink.  
**Glow.** Scarlet vermilion, distinct blue and white base.  
**Gretchen.** Delicate flesh-color, inside soft pink.  
**Massachusetts.** Vivid pink, white center.  
**Pride of Haarlem.** Rosy-carmine, with blue base.  
**Reverend Ewbank.** Lilac mauve, silvery-heliotrope base.  
**William Copeland.** Lilac-rose.  
**Darwin Mixed.**



### HYACINTHS

1st size, 17x18, named varieties.  
 Forcing, 16x17, named varieties.  
 Bedding, 15x16, colors.  
 Bedding, 11-14x15, colors.

### NARCISSI—SINGLE VARIETIES

**Golden Spur.** Deep yellow trumpet.  
**Emperor.** Brilliant golden yellow trumpet.  
**Poetaz Elvira.** Pure white with yellow eye.  
**Poeticus Pheasant's Eye.** Perianth pure white cup orange scarlet.  
**Poetaz Laurens Kostner.** Double nose pure white with yellow trumpet.

### NARCISSI—DOUBLE VARIETIES

**Von Sion.** Pure golden yellow.  
**Alba Plena Adorata.** Pure white.  
**Orange Phoenix.** White and orange.

### NARCISSUS—FRENCH BULBS

**Fancy Paper White** (for indoor planting only).  
**Chinese Lilies (Narcissus).**  
**Jonquils.** Campennelle.  
**Crocus.** Named.  
**Crocus.** Mixed.  
**Snowdrops.** Double.  
**Lily of the Valley.** Selected pips.



**"OUR BUSINESS IS GOING  
TO THE DOGS"**

# CHAMPION Dog Foods

## Your Dog Needs This Healthful Food!

Are you feeding your dog properly? Do you see that he gets the proper proportion of meats, minerals, cereals and cod liver oil?

You can be sure that your dog is getting all these necessary food elements if you feed CHAMPION Dog Foods. These foods provide a balanced ration for your dog in handy form. They will keep him active, alert, with a keen eye and a smooth coat.

A safe food. Made of clean, sweet meats, minerals, choice cereals and cod liver oil. They contain no questionable ingredients such as food factory sweepings, horse meat, formaldehyde nor any other chemical preservatives.

Champion Dog Foods have been used for years by many of America's leading dog breeders, showmen and thousands of fanciers. They are safe, wholesome and economical.



*For Sale by Leonard Seed Dealers and  
at all our retail stores in Chicago.*



## A PAGE ON FUNGICIDES AND INSECTICIDES

The attempt to summarize the militant ways of man in his battle with disease, fungi, and insects that attack our plant world would be, because of its brevity, somewhat imperfect. This quickly developed science that is rapidly progressing fills volumes of space. In the effort to be brief, which means we cannot be concise, we might say of the plants' enemies that they are: first, fungous diseases; second, insects that eat or chew the plant; third, insects that suck the plants' juices; fourth, insects that bore into the plant.

**FIRST. The Fungous Diseases** of plants may be thought of as blight, mildew, spot, speck, dry rot, black rot, rust, scab or mold, etc.

The remedies applied are called **Fungicides**. They may be preventive or cures, or both. Some of them are as follows:

### Bordeaux Mixture

Copper Sulphate .....	6 pounds
Quicklime .....	4 pounds
Water .....	40 gallons

Dissolve the copper sulphate by putting it in a bag of coarse cloth and hanging this in a vessel holding at least 4 gallons, so that it is just covered by the water. Use an earthen or wooden vessel. Slake the lime in an equal amount of water. Then mix the two and add enough water to make 40 gallons. It is then ready for immediate use.

### Ammoniac Copper Carbonate

Copper Carbonate .....	1 ounce
Ammonia .....	enough to dissolve the copper
Water .....	9 gallons

The copper carbonate is best dissolved in large bottles, where it will keep indefinitely, and it should be diluted with water as required.

### Copper Sulphate Solution

Copper Sulphate .....	1 pound
Water .....	15 gallons

Dissolve the copper sulphate in the water, when it is ready for use. This should never be applied to foliage, but must be used before the buds break. For peaches and nectarines use 25 gallons of water.

Practically all insecticides and fungicides are now put up in concentrated form, saving the gardener the trouble of mixing the ingredients. Frequently this prepared article is superior to that which could be mixed at home and often cheaper. In this buying one has a choice as between the fluid, paste or dry forms at times.

**SECOND.** Insects that chew or eat the plant may be bugs, caterpillars, worms or slugs. The poisons we feed to this class of our enemies we call **Stomach Poisons** and some of them are:

### Paris Green

Paris Green .....	1 pound
Water .....	250 gallons

If this mixture is to be used upon peach trees, one pound quicklime should be added. Repeated applications will injure most foliage unless lime is added. Paris Green and Bordeaux can be applied together with perfect safety. The action of neither is weakened, and the Paris Green loses all caustic properties. If applied as a powder it should be mixed with flour or plaster, 100 parts to 1 part Paris Green.

### London Purple

This is used in the same proportion as Paris

Green, but as it is more caustic it should be applied with lime, or with the Bordeaux mixture.

### Hellebore

Fresh White Hellebore .....	1 ounce
Water .....	3 gallons

Apply when thoroughly mixed.

### Arsenate of Lead

Among the insecticides none stand higher than this. It adheres and does not injure the most tender foliage, does not readily wash off and as it is white it shows where it has been applied. It remains so well suspended in solution as to give an even distribution.

**THIRD.** Insects that suck the juices of plants may be plant lice, mealy bug, green and black fly, red spider, scale, etc. The poisons we apply to this class of our enemies kill by striking through the insect's skin and are referred to as **Contact Poisons**, some of them are:

### Kerosene Emulsion

Hard Soap .....	1½ pound
Boiling Water .....	1 gallon
Kerosene .....	2 gallons

Dissolve the soap in the water, add the kerosene, and churn well with soap for 5-10 minutes. Dilute 10 to 15 times before applying.

### Tobacco Dust or Tea

The aphid or plant louse is not apt to go where there is tobacco dust and a tea made from tobacco, just tobacco boiled in water till the water is dark, is an excellent remedy for this class of pest.

**FOURTH.** Insects that bore into the tree or plant are retarded or injured by having Tanglefoot put in their way or Fish-Oil Soap or Whale-Oil Soap smeared or washed upon the plant's trunk.

Frequently some combinations of the above Fungicides and Insecticides may be made with advantage, as Bordeaux with Arsenate of Lead, or Kerosene Emulsion with Paris Green. Again, in advertised articles upon the market are found some very superior combinations and preparations.

**Slug Shot.** This well-known preparation has been in use for more than forty years and its popularity does not diminish. It can be used on all sorts of vegetables, in the flower garden, on fruit bushes, trees or wherever the insect pests appear. It is an impalpable powder, non-poisonous to human beings or stock.

**Sulphate of Nicotine** contains 40 per cent of Nicotine and is not surpassed for use against plant lice or aphids in orchards or truck crops. It may be combined with Arsenate of Lead or Lime Sulphur or both. Use ¾ pint of Nicotine to 100 gallons of water.

**Bug Death.** This preparation we highly recommend. We have many testimonials at hand from large vegetable growers and we feel confident in offering it with our endorsement to any of our customers who want a quick-acting, non-poisonous bug killer. It can be used on all house plants, vegetable and fruit crops, with excellent results.

The application of remedies for fungous or poison for insects may be by dusting, using a powder gun, duster or bellows, and the liquids applied with a syringe, spray pump or vaporizing bellows.

To apply these remedies or poisons when fruit is in bloom may kill the bees and affect pollination.

Keep all poisonous properties under lock and key if possible, where poultry, stock and human beings are not apt to reach it by accident.

## USEFUL INFORMATION

## LEGAL WEIGHTS &amp; MEASURES—Pounds per Bushel

ARTICLES	Ill.	Iowa	Wis.	Mich.	Ind.	Mo.	N. Y.	Ohio
Apples, Dried	24	24	28	22	25	24	22	22
Apples, Green	50	57	57	57	57	57	57	57
Bran	20	20	20	20	20	20	20	20
Barley	48	48	48	48	48	48	48	48
Beans, White	60	60	60	60	60	60	60	60
Beans, Castor	46	46	46	46	46	46	46	46
Buckwheat	52	52	50	48	50	52	48	50
Broom Corn Seed	46	46	46	46	46	46	46	46
Beets	60	50	50	50	50	50	50	50
Carrots	55	50	50	50	50	50	50	50
Charcoal	22	22	22	22	22	22	22	22
Coal, Stone	80	80	80	80	80	80	80	80
Coke	40	38	38	38	38	38	38	38
Corn, Shelled	56	56	56	56	56	56	56	56
Corn, Ear	70	70	70	70	70	70	70	70
Corn Meal	48	48	48	50	50	50	50	50
Cranberries	33	33	33	33	33	33	33	33
Dried Peaches	23	23	28	28	33	33	32	33
Flax Seed	56	56	56	56	56	56	56	56
Grass Seed, Blue	14	14	14	14	14	14	15	10
Grass Seed, Clover	60	60	60	60	60	60	60	60
Grass Seed, Hungarian	48	48	48	50	50	48	48	50
Grass Seed, Millet	50	48	50	50	50	50	50	50
Grass Seed, Orchard	14	14	14	14	14	14	14	14
Grass Seed, Red Top	14	14	14	14	14	14	14	14
Grass Seed, Timothy	45	45	45	45	45	45	44	45
German Lupine	60	60	60	60	60	60	60	60
Hemp Seed	44	44	44	44	44	44	44	44
Hickory Nuts	50	50	50	50	50	50	50	50
Malt, Barley	38	36	34	38	38	38	34	34
Mineral Coal	40	40	40	40	40	40	40	40
Middlings, Fine	40	40	40	40	40	40	40	40
Middlings, Coarse	30	30	30	30	30	30	30	30
Oats	32	32	32	32	32	32	32	32
Onions	57	57	57	54	48	57	57	50
Onions, Tops	28	28	28	28	28	28	28	25
Onions, Sets	32	32	32	32	32	32	32	32
Osage Orange	33	33	33	33	33	33	33	33
Parsnips	55	55	55	55	54	55	54	55
Potatoes	60	60	60	60	60	60	60	60
Potatoes, Sweet	50	46	55	56	55	56	55	50
Peas, Dried	60	60	60	60	60	60	60	60
Peas, in Pods	32	32	32	32	32	32	32	32
Popcorn	70	70	70	70	70	70	70	70
Quicklime	80	80	80	80	80	80	80	80
Rye	56	56	56	56	56	56	56	56
Salt, Coarse	50	50	50	50	50	50	50	50
Salt, Fine	55	50	56	56	50	56	50	55
Turnips, Rutabaga	55	55	56	58	55	50	55	60
Turnips, White	42	42	42	42	42	42	42	42
Wheat	60	60	60	60	60	60	60	60

Dry Measure. 2 pints, 1 quart; 8 quarts, 1 peck; 4 pecks, 1 bushel; 36 bushels, 1 chaldron.

Liquid Measure. 4 gills, 1 pint; 2 pints, 1 quart; 4 quarts, 1 gallon; 31½ gallons, 1 barrel; 2 barrels, 1 hoghead.

Measurement of an Acre. The following will be found useful in arriving at accuracy in estimating the amount of land in different pieces of ground under cultivation: 5 yards wide by 968 yards long, contains one acre, as do also the following measurements: 10 yards wide by 484 yards long; 20 yards wide by 242 yards long; 40 yards wide by 121 yards long; 70 yards wide by 69½ yards long; 60 feet wide by 726 feet long; 110 feet wide by 396 feet long; 120 feet wide by 363 feet long; 220 feet wide by 198 feet long; 240 feet wide by 181½ feet long, and 440 feet wide by 99 feet long.

## Number of Plants or Trees to the Acre at Given Distances

Dis. Apart	No. Plants	Dis. Apart	No. Plants
12x 1 in.	522,720	36x36 in.	4,480
12x 3 in.	174,240	42x12 in.	12,446
12x12 in.	43,560	42x24 in.	6,223
16x 1 in.	392,040	48x12 in.	4,148
18x 1 in.	348,480	48x12 in.	10,890
18x 3 in.	116,160	48x18 in.	7,790
18x12 in.	29,040	48x24 in.	5,445
18x18 in.	19,360	48x30 in.	4,356
20x 1 in.	313,635	48x36 in.	3,630
20x20 in.	15,681	48x48 in.	2,723
24x 1 in.	261,360	60x36 in.	2,901
24x18 in.	15,520	60x48 in.	2,178
24x24 in.	10,890	60x60 in.	1,743
30x 1 in.	209,088	8x 1 ft.	5,445
30x 6 in.	34,848	8x 3 ft.	1,815
30x12 in.	17,424	8x 8 ft.	680
30x16 in.	13,068	10x 1 ft.	4,356
30x20 in.	10,454	10x 6 ft.	726
30x24 in.	8,712	10x10 ft.	435
30x30 in.	6,970	12x 1 ft.	3,630
36x 3 in.	58,080	12x 5 ft.	736
36x12 in.	14,520	12x12 ft.	302
36x18 in.	9,680	16x 1 ft.	2,722
36x24 in.	7,260	16x16 ft.	170

## REFERENCE TABLES

## Quantity of Seeds Requisite to Produce a Given Number of Plants and Sow an Acre

	Quantity per Acre
Artichoke, 1 oz. to 500 plants.	6 oz.
Asparagus, 1 oz. to 800 plants.	1 lb.
Asparagus Roots	1000 to 7250
Barley	2½ bu.
Beans, Dwarf, 1 pint to 100 ft. of drill.	1 bu.
Beans, pole, 1 pint to 100 hills.	½ bu.
Beet, Garden, 1 oz. to 100 ft. of drill.	7 lbs.
Beet, Mangel, 1 oz. to 100 ft. of drill.	5 lbs.
Broccoli, 1 oz. to 5,000 plants.	2 oz.
Brussels Sprouts, 1 oz. to 5,000 plants.	2 oz.
Buckwheat	½ bu.
Cabbage, 1 oz. to 3,000 plants.	2 oz.
Carrot, ¼ oz. to 100 ft. of drill.	2½ lbs.
Cauliflower, 1 oz. to 3,000 plants.	2½ oz.
Celery, 1 oz. to 15,000 plants.	2 oz.
Chicory	4 lbs.
Clover, Alsike and White Dutch.	6 lbs.
Clover, Lucerne.	15 to 25 lbs.
Clover, Crimson Trefoil.	10 to 15 lbs.
Clover, Large Red and Medium.	8 to 12 lbs.
Collards, 1 oz. to 5,000 plants.	2 oz.
Corn, Rice (Shelled).	4 lbs.
Corn, Sweet, ¼ pint to 100 hills.	12 lbs.
Cress, ¾ oz. to 100 ft. of drill.	12 lbs.
Cucumber, 1 oz. to 100 hills.	1 to 3 lbs.
Egg Plant, 1 oz. to 2,000 plants.	4 oz.
Endive, ¼ oz. to 100 ft. of drill.	4½ lbs.
Flax, broadcast.	½ bu.
Garlic, Bulbs, 1 lb. to 10 ft. of drill.	30 to 40 lbs.
Grass, Blue, Kentucky.	20 lbs.
Grass, Blue, English.	25 lbs.
Grass, Hungarian and Millet.	100 lbs.
Grass, Mixed Lawn.	8 to 10 lbs.
Grass, Red Top, Fancy, Clean.	¼ bu.
Grass, Timothy.	2 bu.
Grass, Orchard, Perennial Rye, Fowl Meadow and Wood Meadow.	15,000
Hemp.	2 oz.
Horse-Radish Roots.	4 lbs.
Kale, 1 oz. to 5,000 plants.	4 lbs.
Kohl-rabi, ½ oz. to 100 ft. of drill.	3 lbs.
Leek, ½ oz. to 100 ft. of drill.	1 to 3 lbs.
Lettuce, ¼ oz. to 100 ft. of drill.	1½ to 4 lbs.
Melon, Musk, 1 oz. to 100 hills.	15 lbs.
Melon, Water, 4 oz. to 100 hills.	8 lbs.
Nasturtium, 2 oz. to 100 ft. of drill.	4 to 5 lbs.
Okra, 1 oz. to 100 ft. of drill.	40 to 80 lbs.
Onion Seed, ½ oz. to 100 ft. of drill.	8 bu.
Onion Seed for sets.	3 lbs.
Onion Sets, 1 quart to 40 ft. of drill.	3 lbs.
Parsnip, ¼ oz. to 100 ft. of drill.	3 lbs.
Parsley, ¼ oz. to 100 ft. of drill.	1 to 3 bu.
Peas, Garden, 1 pint to 100 ft. of drill.	2 bu.
Peas, Field.	3 oz.
Pepper, 1 oz. to 1,500 plants.	3 to 4 lbs.
Pumpkin, ¾ quart to 100 hills.	10 to 12 lbs.
Radish, ¾ oz. to 100 ft. of drill.	1½ bu.
Rye.	8 lbs.
Salsify, ¼ oz. to 100 ft. of drill.	8 lbs.
Spinach, ½ oz. to 100 ft. of drill.	¾ lb.
Summer Savory.	8 lbs.
Sunflower.	2 lbs.
Squash, Summer, 4 oz. to 100 hills.	2 lbs.
Squash, Winter, 8 oz. to 100 hills.	2 oz.
Tomato, 1 oz. to 4,500 plants.	2 oz.
Tobacco, 1 oz. to 5,000 plants.	1 to 3 lbs.
Turnip, 1 oz. to 250 ft. of drill.	2 bu.
Vetches.	

## Average Time Required for Garden Seeds to

Germinate					
	Days			Days	
Bean	5	to 10	Lettuce	6	to 8
Beet	7	to 10	Onion	7	to 10
Cabbage	5	to 10	Pea	6	to 10
Carrot	12	to 18	Parsnip	10	to 20
Cauliflower	5	to 10	Pepper	9	to 14
Celery	10	to 20	Radish	3	to 6
Corn	5	to 8	Salsify	7	to 12
Cucumber	6	to 10	Tomato	6	to 12
Endive	5	to 10	Turnip	4	to 8

## Time Required for Maturity of Different Garden Crops Reckoned from the Day of Sowing the Seed

Beans, String.....	Days 45 to 65	Melon, Musk.....	Days 120 to 140
Beans, Shell.....	65 to 70	Melon, Water.....	120 to 140
Beets, Turnip.....	65	Onion.....	135 to 150
Beets, Long Blood.....	150	Pepper.....	140 to 150
Cabbage, Early.....	105	Radish.....	30 to 45
Cabbage, Late.....	150	Squash, Summer.....	60 to 65
Cauliflower.....	110	Squash, Winter.....	125
Corn.....	75	Tomato.....	150
Eggplant.....	150 to 160	Turnip.....	60 to 70
Lettuce.....	65		





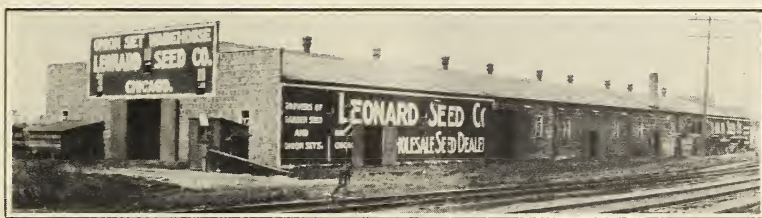
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Our growing operations are very extensive. Each year we plant thousands of acres of Beans, Peas, Sweet Corn, Cucumber, Radish, Onion, Tomato and many other varieties for seed production only.

We have growing and receiving stations in all sections of the country where conditions are best for producing seeds of **LEONARD QUALITY**.

## LEONARD'S ONION SETS

Ninety percent of the Onion Sets used and sold in the United States are grown at Chicago.

*Leonard's Onion Sets are the Chicago standard.* We are the pioneers in Set-growing here. We claim a superiority for our Onion Sets which comes from superior knowledge in planting, harvesting, storing and shipping, as a result of long continued experience and large operations. We are now and for many years have been the leading Onion Set growers.





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